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THE MYSORE UNIVERSITY MAGAZINE

FEBRUARY, 1919

EDITORIALS

DURING the last three months the annual convocation addresses of the different Indian universities have been delivered, some of which have already been noticed in this magazine. The convocation address delivered before the Calcutta University by His Excellency Lord Chelmsford, the Chancellor, deserves special notice for the attention it directed towards some questions fundamentally affecting the interests of the Calcutta University, and indirectly those of the other Indian universities. Two incidents connected with the convocation call for mention on account of their novelty and import. A Guard of Honour, one hundred strong, of the Calcutta University Corps, was drawn up for inspection by the Viceroy. The Corps forms part of the Indian Defence Force, and everyone who has the welfare of the student population at heart will welcome this new feature, making, as it must, for discipline and efficiency and other moral qualities which are not directly fostered by our educational system. The other innovation was the spreading out of the proceedings over two days, owing to the large number of candidates on whom degrees were conferred. Considering the disproportion between the number of literates and illiterates in this country, we need not be concerned at the large number of degrees conferred. But it should be a matter of concern that one single university should have the overlordship of so vast a number of students as that implied from the proceedings of the Calcutta University convocation.

Two years ago the Viceroy in his convocation address dwelt on the need for a strong Commission to sit on the affairs of the Calcutta University. The Commission has finished its enquiries, and the publication of its report—delayed by the effort to arrive at unani-

mity—is now almost hourly expected. Its findings will affect not only the Calcutta University, but Indian universities generally. It is safe to say that it will advocate some startling reforms which will not find ready acceptance with all. But it is consoling to know that the Viceroy does not intend the Report to be pigeon-holed, provided that “the members of the Commission are unanimous in their main recommendations.” Of this there is now every prospect, and we may therefore look with confidence to an immediate era of much-needed university reform. Of the need for such reform, His Excel-



SIR RABINDRANATH TAGORE AND SOME MEMBERS OF THE STAFF OF THE MAHARAJA'S COLLEGE, MYSORE.

lency gave one proof when he referred to the “vast multitude” of some 23,000 students who are preparing for degrees under the single University of Calcutta, which is mainly an examining body with no direct control over its army of students. Naturally the strain on the university organization is enormous, and the time is certainly ripe for the appointment of a full-time Vice-Chancellor—as was indicated by the Viceroy. There is a limit to the efficiency of the gratuitous services of public-spirited men, and one of the very first reforms should be the formation of smaller manageable universities with full-time Vice-Chancellors. The reform in this direction of the Calcutta University, the largest university in the world, is in sight, and for this prospect of efficiency we have to thank His Excellency the Viceroy. Of the 23,000 students preparing for degrees, 19,000 follow literary courses. Such a disproportion is nothing less than a calamity

in a country crying out for educated men to help in industrial development. The Chancellor, then, did well to draw attention to this fact and to the Industrial Commission, whose sittings synchronised with those of the University Commission. Capital and labour are both wanted for industrial development, but above and beyond these are wanted educated, intelligent men as leaders, supervisors and organisers of labour in the different directions pointed out by the Industrial Commission.

The closing words of a notable address were very properly devoted to the qualities which are needed in the great work of reconstruction which lies before India and the world as the result of the upheaval caused by the war. "The qualities which have served our people and our allies so well in the war, and which are essential for success in the task now before us, are not to be acquired in a day nor without serious and consistent endeavour. Their foundations must be laid in the home, the school and the college, obedience to parents and to teachers, assiduity in study, punctuality in habits, the cultivation of the true instinct of sport in the playing field, and hearty co-operation with fellow-students and instructors. These are things which fit youth to tackle the problems of life honestly and effectively."

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THE Madras University convocation address, which was delivered by Sir Thomas Holland on the 21st of November, did not follow the conventional lines to which we have long been accustomed. Instead of an abstract disquisition on university education, Sir Thomas, a practical expert in his subject, discoursed concisely on the present industrial condition of India. So completely divorced are the Indian universities from such a mundane material subject as industrial development, that to some people the address came as a mild wonder and incited the enquiry as to what possible connection there could be between university education and industrial regeneration. On the need for the latter all are agreed, and it was the happy privilege of Sir Thomas Holland to make clear, beyond all doubt, the intimate connection which should exist between national industry and the universities, and the bounden duty of the latter to supply the intellectual foundation for the former. Some plain speaking was necessary, and the defects of the existing Indian university system did not escape attention; and it is gratifying to note that Sir Thomas was of opinion that teaching universities, rather than a system of independent affiliated colleges, were best suited to forward the cause of industrial education. If that is so, and naturally we think it is so, then industrial India will have to wait, not indefinitely we hope, for the reform of the university system before she can

expect complete educational co-operation in the greatest task which lies before her. Meanwhile, it is open for the Indian universities to adapt their courses in the directions indicated, and the Madras University may derive some comfort from the fact that she has already appointed a university professor of economics, and has instituted a diploma in the same subject. A very obvious line of action is the foundation of scholarships and fellowships in the interests of industrial research. There are some who think that the full development of India's natural resources—of course, in the interests of India—is impossible unless it is accompanied by political development. We wish we were as fully assured of the certainty of the same degree of industrial development as we are of the political. It is on the former that the future prosperity of India will mainly depend, and all well-wishers of this country must be grateful to Sir Thomas Holland for the sincerity, friendliness and import of his remarks on such a subject.

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IN the August (1918) number of this magazine reference was made to the fact that the Senate of the Mysore University had passed a resolution in favour of the free education of the arts students attending the University. Both in India and in England there was a misapprehension that the resolution excluded science students, who, in the opinion of more than one of our contemporaries, deserved the first consideration. As we explained, the term "arts" in Indian universities includes pass science students, and these therefore were covered by the resolution. But in the Mysore University there is a special course for B.Sc. students, and in so far as these were excluded by the terms of the resolution, our contemporaries went on correct premises. They may now be interested to know that the Government of Mysore, while refusing to make the arts courses free, has passed an order abolishing fees for the B.Sc. course. The policy of the Government is quite in accordance with the tendency nowadays to encourage able students to take to subjects of a practical turn with a view to future industrial development. In Mysore, at least, the student with a decided bent for science will be freed from one part of the cost of his education, and will also probably have the prospect of an assured future. The policy of the Mysore Government in giving gratuitous education in advanced science is only a further illustration of the unceasing and far-reaching effort made by the authorities during the last few years to develop the industrial resources of the State.

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THE opening, last month, of the University Students' Club, Madras, by Lord Pentland, the Governor, is an event which calls for

sincere congratulation. That the University should have been for more than fifty years without such a very obvious means for social facility between the different colleges strikes one as somewhat anomalous. It is not as though the suggestion had never presented itself. For so far back as 1893 the idea of a university union took shape, and in the following year the enthusiastic inaugural meeting of the Madras University Union was held under the presidentship of Dr.



H.E. LORD PENTLAND, GOVERNOR OF MADRAS.

Miller, the Principal of the Christian College. But a quarter of a century ago such a scheme as that which has now come to fruition was looked on askance by the higher authorities, and the Union died of inanition. Times have changed, however, and the fate which overtook the Madras University Union is not likely to be repeated in the case of a club with a fine home of its own, and which owes its birth to no less a person than His Excellency the Governor. Apparently, the inception and establishment of the club owe nothing to the University

as such. The idea is Lord Pentland's, and the management is directly under the control of all the heads of the affiliated colleges situated in Madras. In a matter of this kind we should have liked to see the University itself taking the lead. But the main thing is that the club is an accomplished fact, and in any case the University will benefit. As headquarters, at least, the University will now stand for the student as something more than a senate house and a lately-added library. Henceforth the University Students' Club, with its numerous facilities for recreation, exercise and social intercourse, will be a real living symbol of the University, a common and delightful meeting-place for students from different colleges, and a centre of union provocative of feelings of respect towards a newly-discovered *alma mater*. The new club has a specially gratifying feature in its gymnasium, with up-to-date appliances from America, and a physical director to advise the students and to direct their exercises. The subscription is small enough to be within the means of most students, and as the institution is meant to be self-supporting we trust that for this reason, as well as in their own interests, the Madras students as a body will enrol themselves as members.

THE authorisation of the medical inspection of schools by the Madras Government is worthy of note. It shows that India is at last coming into line in this respect with the best educated countries. Of the crying need in India for such inspection there can be no manner of doubt. School buildings are in use which are insanitary and have no provision for games and exercise, and which children attend with impunity although suffering from contagious diseases or from direct contact with such. Other children suffer from preventable physical defects, which become chronic and a constant source of discomfort and disability from want of proper attention at an earlier period. The health of those who in a few years will become the adult population is a national concern of the first moment, and although India has a teeming population of over three hundred millions, that will avail her little unless there is quality as well as quantity. We note that the order of the Madras Government is primarily intended for schools. "The pupils in colleges are older, and in many cases it is too late, by the time collegiate life is reached, to treat successfully defects in health." However, in those few colleges in which the tutorial system is in force, it is left to the tutors to draw attention to questionable cases of health. We do not think that the reason given for the general non-introduction of medical inspection into colleges is a good one. Other far more valid reasons could have been alleged. As we have more than once pointed out, medical inspection is in force in several American colleges and

universities, and the idea of extending such inspection from the school to the university is finding more and more favour in England. However, we have no wish to appear ungrateful or captious when so bold a step forward has been taken in the matter of medical inspection. All we now hope is that the authorities will not allow the inspection to degenerate, as it may easily do, into a farce or even into a formality.

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THERE was some plain speaking on November 16th at the first meeting of the Executive Committee of the Students' Advisory Committee, Allahabad, on the unfitness of some Indian students who proceed to the West for the furtherance of their studies. Undoubtedly, not every student who wishes to proceed to Europe should be allowed to do so, for there have been several cases in which students have returned to India without having benefited by their stay abroad, where they had been a source of great anxiety and expense to their parents or guardians. In some cases students leave India without due thought and without special preparation for the line of study they intend to take up; or more often they are unprepared for the preliminary examination which it is necessary they should pass before they can enter on their particular course. It is pathetic how much time is often spent in overcoming initial difficulties abroad which should have been surmounted in India. There are not a few people who think that equal facilities for higher study should be available in India, and the necessity for foreign training thus obviated. The fact remains that it will be long before India will have such facilities, and even when such facilities do exist, an Indian student who is qualified to profit thereby will derive immense benefit from a stay in the most advanced countries in the world. We note that several speakers, including Indian gentlemen, animadverted on the absence of "grit" in practical work on the part of the Indian student, and the dislike of the latter to take off his coat and to work with his hands at the bottom of the industrial ladder. "He wanted to become manager at once." This is an inherent defect accentuated by the literary bias of the education received. Nevertheless, it must be remedied if our educated young men are to become successful industrial leaders. One speaker suggested that, in order to test the bent and capacity of students anxious to proceed abroad for technical education, a previous course at some Indian technical institute and factory should be demanded, and to avoid the necessity in some cases for going outside the country it was suggested that the secretary should get into touch with commercial concerns in India with a view to seeing what openings were available for training and employment. Altogether, there was a practical character attaching to the discussion well in keeping with an Executive Committee on so important a subject as the training and employment of Indian students.

THE beginning of the year sees India inevitably deluged in conferences—political, social and educational. So great is their number that it is impossible to follow their proceedings in detail, and much of their interest and influence is accordingly lost to the general public. But one of these conferences, the Economic Conference at Bombay, deserves a better fate than that of being overlooked among the press of longer-established and more attractive bodies. Without wishing to undervalue the importance of the other conferences, we attach a special significance to the one which concerned itself with subjects bearing on the economic development of India. Fortunately, the last few years have witnessed the vigorous beginning of the study of economics in their relation to India. But compared with other countries, this country has only touched the fringe of a subject which so vitally affects her material interests. The Economic Conference which was started at Calcutta only last year promises to have a vigorous future, if we may judge from her past proceedings and her programme for the future. Its members are no dry-as-dust exponents of a dismal science, but enthusiastic supporters of an up-to-date subject of intense interest, bearing directly on the economic welfare of this great country. For the impetus which has lately been given to the study of economic science in India we have to thank our universities and also the small body of young Indian writers who have written so well on the subject. Both these classes are represented in the conference, and this fact will go far to ensure the success of a body in whose welfare we are all concerned.

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EXAMINATIONS play so important a part in our educational system in India that their *raison d'être* should be a subject of first interest. Unfortunately, many people accept them as a necessary evil and give no more attention to the matter. To what extent examinations are necessary, or why they should be an evil, are questions which demand far more knowledge and thought for their answer than most people imagine. Until a better substitute can be found, examinations cannot be dispensed with; for some test, however imperfect, of knowledge and capacity is absolutely essential in any well-ordered society. Even at their worst, when indiscriminately and mechanically employed, examinations act as a stimulus to teachers and pupils, and help to standardise curricula and teaching institutions. And unless we are prepared to lay the entire responsibility for the appalling percentage of failures which attaches to every public examination in this country to the caprice and undue severity of the examiners, then we must admit that examinations in India serve the very useful purpose of pointing to the need for a radical reform in the system of teaching. But examinations have their abuses no less than their uses, and it is on the abuses that we need to concentrate our attention. The number of external or

public examinations have to be diminished rather than multiplied, and gradually, as the result of increasing teaching efficiency, their place has to be taken by internal examinations conducted largely by those who are responsible for the teaching. In widely-conducted examinations every means should be taken to secure, as far as possible, uniformity in valuation. It has to be remembered, too, that some subjects put a premium on the mere acquisition of knowledge or facts, and that in every examination-paper some questions should test how far such knowledge has been assimilated. Nor is it necessary that every subject taught should be examined—but in such cases good teaching is essential, and, given that, science pupils will benefit from a lesson in history in which they are not to be examined, as history students will from a lesson in science. That the written examination should be supplemented by an oral test in a personal interview is a principle which is finding increasing support. The obvious drawbacks to such a test are more than counterbalanced by its advantages, and these latter are the more apparent when candidates have to be chosen for public service. In India there is special need to emphasise the fact that written examinations can only test, and that, too, in an imperfect manner, certain qualities which are only part of the equipment for a successful career. How many who have done only moderately well in examinations have had the highest successes in life, while not a few who have done brilliantly in the same tests have not lived up to the expectations formed of them, and have been easily left behind by those whom they scorned in the examination room! As things are, examinations in India influence the whole system of education to an alarming extent, and are responsible for the pernicious view that their successful passing is the end of education and the sole passport to success in life. Should our readers care to pursue the study of this important subject, as we trust they will, we would recommend to them a book just published, on *Examinations and Their Relation to Culture and Efficiency*, by Mr. P. J. Hartog, a member of the Calcutta University Commission, and a past-master in the subject. The best of us will learn something from his scientific analysis and comprehensive view of examinations.

It is gratifying to learn that the Modern Language Research Association in England is now an accomplished fact, and that it has held its first annual meeting. It is gratifying because that body will remind us that research work is not to be exclusively associated with science and industry, and because the importance attaching to the study of modern languages is emphasised. No one wishes to undervalue the primary need for scientific and industrial research. The Great War has patently and insistently shown how great is that need.

But the dictum that "man shall not live by bread alone" is truer now than it was when uttered nearly two thousand years ago, and it is as well to guard against the possible danger of giving too material a bent to education and thought in these days of stress and storm. The future progress of the sciences is assured; not so assured are the prospects of the arts and literature. Moreover, the Modern Language Research Association will discharge a social and an international purpose, which will serve as a foundation for that peace and friendship among the nations to secure which the Great War was waged. Already, in England and in allied and neutral countries, a great impetus has been given both to the popular and scientific study of modern languages, and that impetus, especially in its higher range, will be strengthened and systematised by the guiding hand of the Association. One other purpose the Association will serve—the humbler but useful purpose of encouraging the isolated, disregarded, teacher of modern languages to pursue and bring to fruition his scholarly instinct and learning. As a member of this Association he will receive encouragement: direction if he needs it, and recognition when he deserves it. Membership is not restricted to the United Kingdom, in which practically every university is already represented. It is open to graduate students of the British Dominions, including India, the United States and other countries. India, the home of a hundred languages, and in which the modern language problem awaits solution, should at once identify herself with the Association, both collectively through her universities and individually through those many sons in whom the linguistic faculty is developed in the highest degree.

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WHILE the other English universities are adapting their curricula to the changed educational conditions, Oxford, so far, has remained obdurate. She has, indeed, introduced modern courses, but this action is largely stultified by the retention of Latin and Greek as compulsory languages in the Entrance examination. One hundred and twenty Oxford graduates, who are also headmasters, have memorialised the University for the abolition of these languages as compulsory subjects for Entrance. Will Oxford give heed to the warning, or will she obstinately cling to her medieval traditions and be left stranded by the advancing wave of progress? Curiously enough, side by side with this attitude, both Oxford and Cambridge are founding chairs in modern subjects like French and Italian; and Oxford, in particular, has good reason to be grateful for recent generous endowments for the establishment of professorships in those two languages. Our contemporary, the *London Journal of Education*, in referring to the gift of £25,000 (Rs. 375,000) for French says: "The money will not be wasted if it induces classical scholars to acknowledge that French is not the

soft option it has long been credited with being, and that translation into French presents as many difficulties as Latin or Greek prose." We have no doubt in our own mind as to the "difficulties," but we fancy that many a sun will set before the authorities at Oxford will admit the truth of such a soft impeachment.

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JUST as the separate education of the subnormal, or mentally deficient, class of children has proved a great success, so there can be no doubt that a similar process applied to the supernormal, or mentally superior, class would prove equally beneficial. But while the subnormal pupil has long been, and very properly, the subject of solicitude and experiment, the supernormal class is only just beginning to arouse attention, although its importance as a national asset is at least not less than that of the subnormal. Every teacher is faced with the alternative of teaching down to the average boy—which is his plain duty; or teaching up to the supernormal boy—which is good for the latter and fatal for the average. It is a charge only too well-founded in many cases, that in the English public school the lure of scholarships has resulted in the attention of the teacher being concentrated on the brighter boys at the expense of the duller. It is undoubtedly to the national advantage to foster the most promising intellect, and it is in the interests of all that the supernormal should be treated as a separate class. This is what they are just beginning to think about doing in England, what they have just started to do in the home of "Kultur," and what they have been doing for some years in America. In Berlin, now the scene of social and political chaos, and surely not of educational experiment, two special psychologists were recently engaged in testing the memory, powers of concentration, comprehension, decision, intuition and observation of picked pupils from the lower schools. The candidates were all subjected to the same tests, and appraised by the total aggregate number of marks they obtained. The method employed bears witness to the German love for system and standardisation, but the results were later on confirmed by the teachers to whose care the successful candidates were entrusted. We may differ as to the method of testing exceptional ability, but we shall probably all agree that in the national interests such ability should be sought out and specially fostered.

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THE introduction of a new style of handwriting is by no means uncommon, and we remember several in the course of our experience. Naturally each claimed to be superior to all its predecessors, although the superiority lay mainly in the amount of slope to be given. But now a *bonâ fide* new style of handwriting is being introduced in England, and has already met with considerable success. This cannot

be without interest in India, where the English script is a foreign one, is fundamentally different from the Indian scripts, and where English handwriting is, with notable exceptions, generally very poor. A new style of English penmanship, therefore, if it is easy to acquire and is readily legible, is deserving of sympathetic treatment. The latest style claims to possess both these qualities in the highest degree, for it reproduces the printed unjoined characters of the book. It is the script which the very young beginner naturally copies from his reading book with remarkable success, as those who have had much to do with the teaching of infants can verify. The new style has been officially recognised by several local bodies, and will be accepted by the Civil Service Commissioners. We lately had occasion to see the handwriting of a successful candidate in an important public examination in India. The candidate had adopted the printed form from the beginning of his career, and we were much struck by the picturesqueness, the neatness and extreme legibility of the writing. How often the good work of a student is marred by bad and illegible handwriting! Graces of penmanship are secondary considerations, but legibility is an indispensable requisite. It is not in our own interests, nor does it add to the pleasure of the reader, when we inflict on him the unwarrantable task of deciphering our slovenly hieroglyphics. And there is not the slightest excuse for the offence, for bad handwriting is entirely due to simple preventable causes, and among these bad teaching, or no teaching, is largely responsible. In many a so-called writing lesson, the proper position of the teacher, the pupil, the pen, and the writing book, although of fundamental importance, is a matter which receives little or no attention. In India, the materials of writing are often of the worst description. Inferior, scrappy, dirty, and partly-used bits of paper are seen in use. Pens are used almost to the bitter end, and are often of a kind better adapted for vernacular writing than for English; and ink well-watered on the score of economy is not conducive to good writing. One advantage of the new print script would be the comparative ease and accuracy with which its formation could be acquired independently of the teacher. The use of bad materials will, of course, persist unless sternly prohibited, whatever style of writing is introduced. But as there is little doubt as to the superior legibility of the printed unjoined characters, the adoption of the new style deserves sympathetic attention.

THE Great War has naturally given a stimulus to the effort which the United States has all along made for the development of the patriotic spirit. On the bed-rock of her Anglo-Saxon population there is superimposed a more heterogeneous mass of people than is

to be found anywhere in the world. It is no light task to train up as loyal American citizens the numerous emigrants who reach her shores from almost every country in the world, the majority of whom are poor, ignorant, without knowledge of English and without fixed principles. From the first the policy of the United States has been to infuse into all immigrants the spirit of responsibility which attaches to their new citizenship, and to train them to have a due respect and regard for the honour and welfare not only of the individual State, but of the country at large. In this she has been relatively successful, and many of the most unlikely of her new comers have become law-abiding, loyal and patriotic subjects. The patriotism thus engendered is no mere emotional, impulsive sentiment based on the saluting of the national flag by school children, the singing of patriotic songs, and the celebrating of the 4th of July. So far as the authorities can make it, it is an intelligent, reasoned patriotism, based on instruction in all those subjects which are likely to inform the masses and inspire them with something like gratitude and loyalty towards their adopted country. A knowledge of the rights and duties of citizens, the meaning of the constitution, and the work of the President and Congress, form part of the school course. The boy is taught to be proud of his country, and when a man, as the Great War has shown, he is more than willing to make his country proud of him. In the work of inculcating principles of citizenship, the State has the support of voluntary societies, such as the National Security League, whose headquarters are at New York and whose activities are being largely extended to educational institutions at the present crisis. America is the greatest democracy the world has ever seen, and the future of the Republic should be assured, seeing the pains she is at to secure for her people not only a sound general education, but also a reasoned, intelligent citizenship.

SHOULD HIGHER EDUCATION IN MYSORE BE FREE ?

AMONG the educational topics of importance that have been engaging public attention in Mysore at the present moment, none appears to loom so large as that of "*free education.*" There is hardly a recognised or responsible public body in the State which has not bestowed some serious thought on it. It was discussed at the Economic Conference, the Representative Assembly, the Legislative Council, the University Senate, not to say anything of the space devoted to it in the journals inside as well as outside the State. Above all, it has gained additional significance by the special emphasis laid on it at the recent Convocation of the Mysore University. Though the great majority of those who have so far expressed their views on the subject are staunch advocates of free education, yet there have been some with views opposed to the adoption of such a measure. Some of them hold that the abolition of fees in the higher stages is positively harmful, and therefore objectionable. Whatever the ultimate decision of the people and the Government may be, the subject evidently is serious enough to justify further enquiry.

In a previous article in this magazine, I said that one of the aims of the Mysore University should be to open its gates without restrictions to all. At this temple of knowledge, as at that of Visvanath in Kasi, whosoever desires to worship should be able to do so, be his caste, country, or rank, what it may. That such an ideal is no idle dream, but a practicable reality within reach, will be evident from the constitution of some of the great modern universities of the world. In a review of a very recent publication, issued under the auspices of the Council of the University of Paris, entitled *La Vie Universitaire à Paris*, it is pointed out that the Paris University "is supported by the State, it is entirely democratic, it is independent, it is *free*. Maintenance is the only charge the student has to bear. . . . Where Oxford in normal times sees some 3,000 students, the University of Paris instructs some 16,000 to 17,000, of whom 3,000 are foreigners." Let it not be said that the French treasury is overflowing with money, and that therefore France has made her universities free. It is her high educational ideal and national spirit that has led her to make the sacrifices required. In spite of the disastrous effects of the War on

her financial resources, she has made during this war strenuous efforts to have "*free*" secondary education also. Now, it is the attainment of a somewhat similar goal in this State that is sought by the "*Free education*" movement. The grounds for making higher education free have been often eloquently put forward. But of the arguments advanced against the adoption of the principle of "*Free education*" in Mysore, the most noteworthy appear to be only two, *viz.*, the financial and the caste or communal. The latter views with alarm the advantage that certain small sections of the community are likely to take of such a measure, while the former pleads insufficiency of public funds. Let us examine each of them separately.

Turning to the financial objection, it is necessary at the outset to have some clear understanding of the financial interest of the State in public education. What is the justification for the State spending its revenues on the education of the people, instead of leaving it entirely to private enterprise as in some of the Western countries. To the extent to which it is *realized* by a State that the most valuable part of its assets consists of the intellectual resources of its people, the State feels called upon to expend its money on public education. A State is not awakened to such a consciousness of the value of education all at once. Only as it gains experience in the struggle for existence does this conviction grow.

Then, if it is recognized that among the best investments that a State can make are those on education, the question arises, what is the best return? Is it the growing numbers attending school or increased percentages of the literates? In the struggle for national self-preservation, it is not merely the rise in the general level of intelligence that counts, though it is a most potent factor in itself. It is not the difference in the percentages of literacy in Germany and other countries that has given the former its advantages. That, without which literacy is ineffective, is the knowledge of the inventors, the discoverers and the thinkers. This is the spark. The most valuable item of the returns on investments on education lies in the production of intellectual 'leaders,' which is one of the chief objects of universities. It is because the 'leaders' are worth *more* than the followers that the State spends *more* on them. Otherwise there is absolutely no meaning in a Government spending by the hundred and the thousand on every pupil of the collegiate grade, while it restricts expenditure to tens on the pupils at the lower stage. Not that elementary education is of no value or importance, but that from the point of view of the certainty as well as the quickness of return for national or State investments, the needs of secondary and university education are comparatively greater.

Nothing, therefore, indicates more clearly the ridiculousness of the argument that public money should not be spent upon higher education

because it benefits only the few, the intellectual few, the few who can form the best part of the return for the investments made by the State. It is needless to quote economic authorities. It is enough to remind ourselves that the production of a single Bessemer or Faraday is a more immediately useful return, as it gives a more finished product than a rise in the general level of intelligence of the *million* by a standard or two.

To contend that higher or university education should *not* be made free unless the masses can benefit by it, or that we should wait till the time arrives when the shepherd in the field can solve questions in integral and differential calculi, is to propose a national suicide. For other nations with better wits about them, who are satisfied with intellectual 'leaders,' will soon overtake us and drive us to the wall.

A word of caution is necessary here. Let not the educational viewpoint be confounded with the purely administrative. The opposition is, in some cases, the outcome of a fear that the academical men, who more or less largely come from particular sections, might monopolize the State appointments, and that therefore every effort should be made to allow only a small number to proceed to the university. There need be absolutely no connection between the two. Appointments in public service are to be determined by factors conducive to the best interests of the political and economic ends in view. But the work of extending knowledge should be governed by considerations of a far different kind.

As a slight divagation from the main issue, it may be observed that, from the point of view of the most immediate and material return for State investments on education, there is much significance in the emphasis laid everywhere on the paramount need for fully equipped technical institutions. It will be remembered by some, how His Highness the late Sri Chamarajendra Wodeyar, of revered memory, inaugurated the academical courses of study in this State with the establishment of a *Science* College at Bangalore. How His Highness wished that the whole of the block round about the Central College should eventually form a "Science Square," with the establishment of various science institutions! Our present prosperous gold-mining industry, the offshoot of the organisation of the State Geological Department, was an index of His Highness's far-sighted policy. Though it was easier and cheaper to institute history or philosophy courses, His Highness for several years strongly resisted the introduction of the purely humanistic studies, despite the repeated prayers of the Representative Assembly. Not that His Highness valued those studies less. But he felt that what was most urgently needed for the country was a knowledge of the sciences, for providing which he never stinted State aid. His Highness knew as well as any modern enlightened

sovereign that the best return was to be got from higher education of that kind, however small the number that pursued it.

If it be granted, then, that the interest of the State in the education of the people is paramount, and that the return in the higher stages is not dependent upon caste, class or mass, but upon the creation of intellectual 'leadership,' it will be seen that the Rs. 20,000 which our University asks for making collegiate education free, is nothing by the side of the Rs. 7 or 8 lakhs expended on it every year. And it is of little consequence how small the number, or which section of the population, is qualified for this higher work. So long as the University admits all alike (and it has always been quite impartial) there can be no room for just complaint. If the expenditure of seven lakhs on university education is right, it cannot be wrong to forgo the insignificant twenty thousand in fees.

Again, the additional amount required for making secondary education free, is said to be about a lakh and a half, or two. But this amount, the people readily offer to provide by means of a special tax. When such is the eagerness of the citizens themselves, it is hard to understand why the privilege should be withheld. All public moneys ultimately come from the same source, the people.

It is said that this tax should be diverted to other branches of education. But would the tax-payers agree to the money being put to other uses than those for which they intended it. And, once again, will not the question arise, which branch gives the most *immediate* return? Without a continuous supply from the secondary grade, and without adequate provision for every caste and creed to reach the university stage, neither can the large expenditure on the University be justified, nor can it fulfil all the expectations of the public.

Next, the caste or communal argument also proceeds from a confusion of ideas—economic, political and educational. It is perfectly just that all castes and creeds should have a fair share of the so-called "loaves and fishes" of public service and of representation on public governing bodies, and that no particular class should be debarred from seeking these privileges, so that the tendency towards the accumulation of wealth and power in the hands of a few may be effectively checked. But how far do these principles apply to the world of education? Would it be rational to prevent the accumulation of knowledge either in individuals or bodies of men? No human society, however barbarous, has ever sought to prevent the gathering of wisdom, though narrow-minded peoples have often refused free access to knowledge or a free dissemination of it. Such a prohibitory injunction would spell the extinction of not individuals or classes or parties, as it is thought, but the entire community, composed of all parties and sections. And is there any fairness in contending that all the citizens should not be educated *free*, because a few are likely to be more

educated than the rest? Is it rational to argue that unless and until all men can be Newtons and Bacons, *equal* opportunities should not be provided for all? In a word, the opponents would forgo *free* education in regard to the 27/28ths of the population who are backward, so that they may have the gratification of keeping the remaining 1/28th behind, lest this fraction should be more educated than it is. However forceful such an argument may be to their understanding, little need be said here of its worth in the estimation of dispassionate minds.

The opponents again admit the reasonableness of making education free in the primary grade, because certain classes form a very small fraction of the numbers educated; and they oppose the principle, because in the higher grades such classes increase in number. Is this not enough to show that the opposition to free education is with them *not* a question of educational *principle*?

That every earnest effort should be made to enlighten the ignorant, to lift up the low, none with any trace of humanity or civilization in him would question. But what should be said of the attempt at preventing those with a little light from gaining more, which they might, with "free" education? As between one section and another, or one caste and another, this feeling may be a source of a kind of satisfaction. But viewed from the standpoint of the entire community or State, whose is the loss if its best talents are deliberately kept back in the race for intellectual advancement? And the best talents, it should be borne in mind, not infrequently lie buried among the poorest who stand most urgently in need of a "free" education.

Let politics and education be assigned their respective spheres, and impartially considered.

But it should not be forgotten that whatever the relation of castes and creeds may be, or may have been, in matters 'social' and 'political,' so far as matters relating to 'knowledge' are concerned, such an opposition is altogether unprecedented and unworthy of Hindu traditions. Who are those Gurus that stand highest, the great teachers whose memory is cherished by every Hindu of whatever caste or creed—and whose blessings are sought every morning, evening, and mid-day? To which caste did Vyasa and Parasara belong? They were neither Brahmins nor Kshatriyas nor Vaisyas, but Sudras. Who are among the authors of the most sacred of Hindu poems and among the teachers of the highest of their philosophies?—Valmiki, Suta, Vidura, Janaka and Krishna. Are they not beacon lights, intellectual giants of our common motherland? Did they not, like their Brahmin gurus, impart knowledge and elevate all classes alike? The Mahabharata bears unquestionable testimony to the fact that the *highest* knowledge was placed at the disposal

of women and Sudras, in a form suited to them. And to this day this noble tradition is maintained and honoured. The non-Brahmins have given of their best to the Brahmins, and the Brahmins of their best to the non-Brahmins. The Hindu knows no difference of caste or colour *in the field of knowledge* and in the world of education. And it is a most un-Hindu act, to say the least, to introduce any element of caste opposition into the University, or for that matter into any province of education.

No future within our ken can see the abolition of all religious, social, economic and political differences. For us and for our children, and our children's children, they will remain. But knowledge has never recognized differences of caste, creed or rank. The temple of knowledge is the one temple where all can and do meet alike as brethren; its fountain is the one fountain of which all can drink as members of one caste or body, each according to his capacity. Shall we not keep that one temple and that one spring inviolate? Shall we not unitedly ask that *equal* opportunity be provided for *all* the children of the land, by making education *free* to the high and the low, the poor and the rich, Hindu and non-Hindu?

Let us also remember that in the veins of many Indian Muham-madans and Christians, Hindu blood is flowing. Shall we oppose their intellectual advancement or shall they oppose ours? Even if they were aliens, what should be our attitude? Let me remind my readers of the Hindu prayer which is recited so often:

"Let all be happy, let all enjoy perfect health, let all find the good of their heart, let no one grieve."—(*Vidyaranya.*)

C. SRIKANTESVARA AIYAR.

WOMEN'S EDUCATION AND VERNACULAR INSTRUCTION

WHILE in the more civilised countries of the West the importance of women in the evolution of humanity is getting to be more and more recognised, while, in fact, women by dint of perseverance and hard struggle are in a fair way to winning perfect freedom and equality of rights and privileges with men in all their varied activities of life, here in benighted India women's education, which is an indispensable condition for any such advancement, is to be invidiously discriminated from men's education, according to one school of educational opinion. Fortunately, we have passed the stage at which it was usual to cry down education for women, for that is now admitted to be as much their birthright as it is of men. But the question of women enjoying equal educational facilities with men is far from being conceded. There seems to prevail a strong feeling in some quarters that Indian women need not, or cannot, be educated to the same extent or degree as men. The present system of women's education is severely criticised as being thoroughly unsuited to Indian conditions, and new schemes are being formulated for its effective improvement. It is certainly a matter for congratulation that the subject is receiving so much attention at the hands of our educational experts and enthusiasts just at present. But in their anxiety and eagerness to secure rapid progress, there is reason to fear that they may contemplate so to reduce the standard of education and revise the curricula of studies as to confirm our women in their ancient rôle of "good wives and wise mothers." It may not be the real intention of the organisers of the new movement to deny to women intellectual equality with men, but that is certainly the practical effect of the proposals which are very strongly advocated by the reformers in Mysore, and which therefore require a careful examination in detail.

The Mysore Economic Conference, at their annual session last June, passed a resolution of a far-reaching character touching women's education. It was to the effect that the vernacular of the country should be made the medium of instruction in the secondary and college grades for women, English being relegated to the place of a compulsory second language, and that the courses of studies for girls

should be revised, prominence being given to the study of subjects of domestic and practical utility. These drastic changes are calculated, it is said, to help in the wide and rapid spread of learning and culture among the generality of our women—a pleasing prospect which is no doubt to be devoutly wished for, and which in the opinion of the reformers is not facilitated by the system now in vogue. It is argued that English education, though it has been in existence for thirty years or more, has barely touched one per cent. of the woman population in the State, and hence a change in the manner suggested above is urged with a view to make higher knowledge easily accessible to the masses. The merit of the new scheme is shown to lie in the fact that time and mental strain are both considerably economised by instruction being imparted in the mother-tongue instead of through the medium of a foreign language like English. Further, it is pointed out that the curricula of studies for girls need urgent revision, preference being given to the teaching of subjects of domestic interest like cookery, laundry, domestic economy, etc., which would help to make our girls “good wives and wise mothers.” These and other arguments in a similar strain contain two distinct ideas of a revolutionary character. They are (1) that the present high standard of English education being unsuited for Indian women, it should give place to a new system conducted chiefly in the vernacular; and (2) that the end and aim of women's education being to secure domestic happiness, the courses of studies for girls should strictly conform to the realisation of the domestic ideal.

These hasty conclusions seem to be based on wrong assumptions of facts.

The chief drawback of the present English education is said to be its failure to attract a larger number of girls to the higher courses of study. In a sense it may be true that our educational achievements have not been commensurate with the liberal encouragement given by our benign Government, and with the strenuous efforts of pioneers in the field of women's education. But causes for the slow progress are primarily to be traced, not so much to the difficulty or unsuitability of English education, as to the baneful social custom of the compulsory early marriage of our girls. If the fault lay entirely in the system of English education itself, there was nothing to prevent our girls from availing themselves of the benefits of higher education in the vernacular, which has all along been provided for them side by side with the English courses of study. On the supposition that instruction through the vernacular would advance the cause of women's education much better, or even faster, we should naturally expect to find a larger number of girl students, comparatively speaking, in our vernacular upper secondary and pandits' courses. Actual strength, however, is far from satisfactory.

In spite of the fact that the vernacular high school course is shorter by one year than the corresponding English course, and though students pursuing either course enjoy the same encouragement by way of stipends, the ratio of attendance is approximately 1 to 5 at present. Surely this state of things cannot be taken as testifying to the popularity of higher education conducted in the vernacular, which seems, in fact, to have fared even worse than English education. What, then, is the true and only satisfactory explanation for the paucity of students in the higher courses? It is that early marriage and prospective early motherhood force our girls to leave school at about the age of twelve or thirteen, when they barely reach the lower secondary stage in which, be it remembered, the study of English is quite optional. At present very few married girls go up to the lower secondary stage, and the number of those who continue their studies beyond is fewer still. It is quite evident, therefore, that, irrespective of the question whether vernacular or English is the medium of instruction, unless our social customs are considerably modified women's higher education cannot advance as rapidly as we would wish.

But conditions are much better now than they were some twenty years back, and increase in number and attendance seems to be only a matter of time. We should remember also that we have a large class of girls from communities among whom early marriage is not compulsory, who are seeking higher education to qualify themselves to serve as teachers or doctors. With most of them the advanced study of English has become a pleasure and a necessity, time and strain being no consideration. They are wanted in ever larger numbers, so that they may serve as the carriers and diffusers of the light of knowledge and culture among their backward sisters, in whatever sphere or walk of life they may be called upon to live. That they are in a minority at present is an additional argument for the creation of greater facilities for their education, the standard of which should be kept up at the present high level. It may not be a happy argument to plead for a high standard of education for our women as the result of the existence of a social evil—I refer to the young widows—which educationalists and reformers alike should try to remove. But short of this, as long as the evil is permitted to remain in our society, education is the next best remedy which will surely mitigate and not aggravate its effects.

Then, again, in prescribing courses of study the age of the students is one of the most important factors to be kept in mind. Lower secondary, secondary and collegiate grades have special reference to different stages of progress. It is in recognition of this principle that an age limit of 15 is fixed for the S.S.L.C. grade. Such being the case, it does not appear possible for girls of twelve or

thirteen years of age to complete their secondary education, even with the substitution of the vernacular as the medium of instruction, unless its standard is very, very low ; nor can girls of such tender age and poor qualifications be regarded as fit to enter on the next higher course. But, for the sake of argument, it is immaterial whether they are considered fit or unfit to receive university education, as it is presumed they leave school at about that age. It may then be asked, Where is the advantage of reducing the standard of education if it does not help us in the least in detaining girls longer at school ? The utmost that can be hoped for from this proposed radical alteration is to send our girls out indifferently equipped, with general culture of a lower secondary grade, without at the same time taking care to ensure a steadier and a larger stream of students for the more advanced courses. In the meantime, such of the girls as have the willingness, the capacity, and, what is most important, the convenience to benefit by higher education, are deprived of the opportunity to proceed to the highest degree of academic proficiency by the barriers of a reduced standard of English being interposed, which under the circumstances is far from desirable. It seems, therefore, quite futile to attempt to gain greater popularity for higher English education by lowering its quality, unless social reforms are made to keep pace with our educational aspirations. A better plan, which will satisfy all parties, is to leave English education alone for the time being, and to develop on the new lines the vernacular system of education for the benefit of the majority of our married girls who stop away very early from school. This is a surer test for finding out how far the present high standard of English is answerable for the unpopularity of higher education.

Then, again, in support of their view, the staunch advocates of the vernaculars hold up as worthy models to be followed the Women's University of Japan and the recently-started Indian Women's University at Poona. But the conditions in Japan, at least with regard to the language problem, may not be applicable to India, while much of the progress of women's education in Maharashtra is in a great measure due to the advance in social reforms. It is significant, however, that this new women's university seems particularly to lack that active co-operation and warm sympathy from Maharashtra women educated in the older universities which its men supporters would wish for (or, can it be that they do not care for it ?). The term, "Indian Women's University," seems to be quite a misnomer, for the simple reason that Marathi, being made the medium of instruction to the exclusion of other Indian vernaculars, it cannot benefit Indian women whose mother tongue is not Marathi. A sound knowledge of one's own mother tongue is no doubt one of the essentials of education, and a study of it should be encouraged by all means. It is also to

be admitted that the salvation of no people depends on the cultivation of culture in any particular language. But at the same time it must be recognised that a good deal of progress in India has been due to English education, and as long as English is the only means of getting access to Western scientific culture prominence should be given to the study of that language in any well-considered scheme of Indian education, whether it be intended for men or for women.

Turning now to the intrinsic merits of the proposal, the vernacular may be a more natural medium of instruction and expression not only for girls but for boys also. But there are practical difficulties in the way of its immediate adoption, for want of suitable books in the vernacular for the advanced study of general subjects like science, mathematics, history, etc. It will take a very, very long time before this initial difficulty is overcome. In the meantime, the reasons why the experiment should be tried in the field of women's education alone are not clear. If it be productive of so much good, it is but right that its benefit should be extended to boys as well. The one-sided application of the principle will create greater disparity between boys and girls, instead of bridging the existing gulf between them. It is only just and fair to demand that the change may be introduced simultaneously into the systems of education of both boys and girls, so that they may stand or fall together. How far the measure will meet with success is difficult to anticipate. But judged from the results of the vernacular system of education, a very careful and adequate preparation of the ground for some years seems absolutely necessary before a fresh trial of it is attempted. At any rate, a sudden change in the present system, under existing conditions, can only result in the lowering of the standard of education and in the impairing of the efficiency of instruction, both of which are to be very highly deprecated.

Lastly, there is one strong argument against vernaculars being made the media of instruction in the academic courses. If the principle were introduced into all the Indian universities, higher education would lose its prestige and general importance, and its interest would become petty and provincial. India would, perhaps, be split up into so many isolated groups on a linguistic basis, and there would be an insuperable barrier for the mobility of scholars and teachers.

As regards the revision of the curricula of studies for girls on purely domestic lines, it is decidedly a retrograde step, not that a knowledge of domestic subjects is unnecessary, but that the acquiring of it should be held up to be the sole object of women's education. However much we may fall short in our achievements, our ideals should be of the loftiest. As the "domestic ideal" of women's education emphasises the necessity and importance of our girls being

trained to become "good wives and wise mothers," it may not be unreasonable to ask for special attention to be devoted in our schools and colleges for the training of our boys to become "good husbands and wise fathers," inasmuch as complete domestic felicity implies mutual adjustment on the part of both husband and wife. Certainly higher education means something more than the mere aiming at domestic happiness. Each man or woman, boy or girl, is a soul to be developed in strict accordance with individual aptitudes, without distinction of caste, creed, colour or sex. The "domestic ideal" of woman's education, however much it may appeal to men, may not be equally welcome to women educated on modern lines. It may not be possible for the majority of our women under the present social conditions to aspire after and attain the highest degree of academic excellence, any more than it is possible for all men to reach it. But that is no reason why women's studies should not be as comprehensive as men's, or that all women should be reduced to a dead level of equality. The fact is, our women have so long been confined to their narrow, domestic circles that their intellect has grown quite stunted and warped. What they want more than anything else at present is intellectual and physical culture. This they can get only if they are given equal facilities with men in the matter of their education. It will not do simply to prescribe that their training shall be limited to their being brought up to be "good wives and wise mothers." I am afraid our women have already got too much of the goodness and wisdom implied in the platitude to need an extra dose of it in this democratic era of the twentieth century. Indian women's excellence is acknowledged to lie in their domestic virtue—in their goodness and docility, and in that subordination and self-sacrifice which found the highest expression in sati in ancient times. That indomitable will, courage, or spirit to completely efface all thought of self in the service of others is still alive, but it is circumscribed within the limits of the family. It needs to be roused and extended by liberal education, so as to include society, nation and humanity within its sphere of influence. Our women should be made to understand that there is a wide sphere beyond the narrow family circle, in which each one must play her or his part if this country is to keep abreast of modern progressive nations. Their mental vision and outlook on life should be broadened if they are to rise in the estimation of their more fortunate fellow-men and women, and if their hearty co-operation is needed to build up that united Indian nationality of the to-morrow, which the spread of English education has made it possible for us to hope for. In order that they may be a help and not a hindrance to progress, our women should be given perfect freedom of choice as regards their educational ideals, and their highest aspirations must be carefully fostered and not curbed. "Self-

determination is the greatest message of modern times, and Indian men, who have so long played the overlord in all matters relating to women, must no longer arrogate rights which do not belong to them." To quote H.H. the Aga Khan: "The change in the feminine standpoint has been coming very gradually, largely owing to a very serious mistake made by *mere* man at the starting point of reform. The constant argument has been that of the necessity for providing educated and intelligent wives and daughters, sisters and mothers, for the men. This well-meaning, but insolent, assumption that it is for some relation, however advanced from present standards, to the other sex that women need intellectual cultivation, has inevitably tended to direct the movement into narrow and deforming channels. The time has come for a full recognition that the happiness and welfare of women themselves must be the end and purpose of all efforts towards improvement." The "domestic ideal" of education is good so far as it goes. But it is not enough to advance in any appreciable degree the regeneration of India, which it is the duty of every one of us to help to bring about. It is not by confining women to a more intelligent performance of domestic duties, though that is also necessary, but by drawing them out so as to enable them to take their proper place in society and co-operate with men, that the uplift of the Indian nation is possible. It rests still in the hands of men, the lords and masters of the situation, to make or mar the future of India by their present attitude towards women, and by the extent of the help they are prepared to give to further the cause of women as an end in itself. Will they rise to the occasion?

K. D. RUKMINIAMMA.

PAPER MAKING AND MANUFACTURE IN INDIA

ONE of the important subjects discussed at the All-India Conference of Librarians, held at Lahore in January last year, was the subject of the very rapid deterioration of book-paper in the Indian climate, and the measures needed to secure the supply of paper which would be durable and lasting for purposes of Government records and libraries. In an interesting paper read to the Conference, Mr. Raitt, Celulose and Paper expert, Dehra Dun, pointed out the reasons why papers introduced into the market within the last half century deteriorated to a larger extent and more quickly than older papers, and he laid stress on the urgent need for a thorough investigation into the matter, and for securing the best sorts of paper for purposes of Government records and libraries in India. The conference resolved that "There exists an urgent and immediate necessity that a supply of paper capable of permanent preservation in India should be obtained and maintained in this country, and that paper of a suitable quality should be used for all records and books intended for permanent preservation in India."

The subject is important, not only from the point of view of keepers of books and records in India, but also from that of the Indian economist, who would wish to see the ancient paper industry of the country revived and developed to the fullest possible extent by the utilization of the abundantly available and almost untouched raw and waste products, declared, on expert authority, as suitable for papers of various grades. Even apart from the interest of the Indian paper industry, and the patriotic desire of the Indian economist to revive and develop it, there is the admitted and much-feared shortage of the world's supply of wood and other products now largely employed in paper manufacture, and the urgent need for discovering further sources of raw materials with a view to avoid crises in the world's paper industry similar to those which occurred in the fifties of the last century by the shortage of rag supplies, and in the seventies for want of sufficient supplies of grasses.

The utilization of the abundantly available supply of numerous kinds of raw and waste products in India suitable for paper is therefore a world necessity, and its successful utilization with a view to benefit the country as much as possible is a matter for serious con-

sideration in connection with the constructive industrial programmes now engaging the attention of Governments and publicists. The subject is again of special urgency in view of the serious shortage of paper supply owing to the war, and the enormous rise in the cost of paper to about six times the pre-war rate—which is greatly hampering the circulation of cheap newspapers for the masses and the spread of elementary education. The subject before the Librarians' Conference was discussed purely from the point of view of the preservation of books and records in India, and the recommendation concerned itself with the best means of securing the supply of paper capable of preservation in the country. It was, however, pointed out by Dr. Annandale in the course of the discussion, that it was extremely desirable that the value of indigenous paper should be investigated, that there was a tendency to ignore indigenous products and methods which he greatly deprecated, and he referred also to the danger of getting experts out to recommend entirely new articles without taking into account indigenous products.

It is a matter of common knowledge that paper-making is a very ancient industry in the East, which was carried on in a state of high efficiency. The Chinese have been making paper for about 2,000 years, and the paper industry in Persia, Kashmir and the Himalayan tracts is at least five hundred years old. Some kinds of paper made in those places were almost imperishable. Mr. Raitt himself produced before the conference a piece of paper, which he said was dug out of a grave in Central Asia, believed to be of the fifth century A.D., and he laid stress on the point that, apart from the exceptionally favourable conditions of its preservation within a grave—dry desert sand—the paper was so strong as to last for nearly fourteen hundred years without the slightest trace of deterioration, and was “as fresh and crisp as if it had been made only yesterday.”

Attention may also be called in this connection to an interesting article in the *Indian Antiquary* for 1876, v. 6, on “Paper Making in the Himalayas,” a detailed description of the very simple and yet quick processes adopted by the hill tribes for making paper of excellent quality and of such dimensions (fine smooth sheets of seven yards square) as would surprise the paper makers of England. A short extract from the article is worth reproduction :

“It (the *set-barua*, or paper plant) is hardy and attains a height of five or six feet. The paper prepared of its bark is particularly calculated for cartridges, being strong, tough, not liable to crack or break—however much bent or folded—proof against being moth eaten, and not in the least subject to dampness from any change in the weather ; besides, if drenched or kept in water for any considerable time it will not rot.”

One would certainly wish to see such a skilled industry revived and developed to meet modern requirements. Though the paper plant referred to above may not yield enough pulp for the ordinary paper

requirements of the country at the present time, yet it may be quite possible to get enough paper made of these and other shrubs to serve the permanent record needs of the country. Pulp-making may be encouraged as a home industry, and the pulp thus made utilized by paper mills in the plains.

It is proposed in this short article to give a very brief summary of the results of expert investigations into the possible raw products for paper manufacture on a commercial scale in India, of the discussions and recommendations made on the subject for over half a century, and to point out the present position, at which, it seems, everything is quite ready made to induce enterprising capitalists and progressive governments to develop the industry with a view to capturing a part, at least, of the world's paper trade, or at any rate bringing about an appreciable reduction in the present abnormal cost of paper, and avoiding the much-feared crisis in the industry which may bring about a serious shortage of supply and consequent further increase of price.

So early as 1850, about the time of the first crisis in the history of paper manufacture owing to the shortage of rag supplies, attention was called to the abundant resources of India in the matter of raw products of various sorts suitable for paper making, and to the expert observations of Dr. Forbes Royle and Dr. Buist on the subject. To quote the latter, from the extract given in a long article on the subject in the *Quarterly Review* for 1855, v. 97, pp. 225-245 :

"In India we have short staple flax and cotton to any amount, almost worthless for the purposes of ordinary manufacture, but perfectly fitted for the paper market. We have cheap, neat-handed and ingenious workmen, abundance of pure water, smokeless skies and sunshine of unsurpassable brightness ; the means, in short, of providing the world with unlimited supplies of paper, if we were only taught how to make it."

This, perhaps, was a very optimistic view of India's resources and possibilities of paper supply for the world's market, but certainly it was no gross exaggeration, for the fact has been investigated over and over again, by one expert after another, and shown to be true, to a large extent, even at the present time. It was pointed out also that apart from the large supplies of rag, cotton waste, hemp, flax and grasses of sorts which could be used for papers of different grades, there was the almost unlimited supply of the plantain, which was one of the best suited plants for paper pulp. Here is what Dr. Forbes Royle said of the suitability of the plantain for paper making :

"Of the value of the plantain fibre for paper making there can, I conceive, be no doubt. Some paper, though unbleached, but excellent as far as substance and tenacity are concerned, was sent from India in 1851 by Dr. Hunter. In the year 1846 Mr. May showed the author some beautiful specimens of note and letter-paper made from plantain fibre. . . ."

It was suggested that apart from the question of utilization of the plant after it had served its purpose as a staple food producer, it could

commercially be grown as a raw material for paper. Dr. Royle had also suggested that the most valuable and elegant substance known as manilla hemp, which could be made into the most durable kinds of rope and ship's rigging, the broken cordage of which could be utilized in making paper pulp of very high quality, could be grown largely in India.

In 1875, just about the time of the second crisis in the history of paper manufacture, when the supply of esparto grass failed, an investigation was made by Mr. T. Routledge into the possibilities of the bamboo as a raw product for paper. Recent experiments of a more scientific, expert and detailed character were made by Mr. Sindall in 1906, and Messrs. Raitt and Pearson in 1912. The two latest reports by these two gentlemen complete the investigation, it seems, from a scientific point of view, and leave the matter at a stage where any enterprising capitalist can undertake the industry with confidence and an assurance of unqualified success. Every necessary detail is given in these reports, and the authors have arrived at a most encouraging conclusion in the matter of the suitability of bamboos of India for papers of good sorts. It has been shown by facts and figures that the industry will be a commercial success, and the pulp can compete with foreign imported pulp, and can even be exported to China and Japan at a great profit. Here is what Mr. Raitt says on the subject:

With the industry divided into pulp making and paper making proper, the future expansion of the latter is assured, and the extraordinary anomaly of a country teeming with raw materials and having good natural facilities for manufacturing them, and yet unable not only to supply its own demand for the manufactured article, but actually having to import partially manufactured material with which to produce the small amount that it does make, will cease. Besides the present local demand and the large expansion of it which may be expected as soon as our paper mills are in a position to undertake it, there is a rapidly-growing market in China and Japan which may be tapped, and which is represented by a present annual import of 30,000 tons of European wood pulp, and on which there is, to pulp manufactured in India, what amounts to practically a bonus of Rs. 15 per ton in difference of freights."—*Indian Forest Records*, v. 3, pt. 3.

In a lecture at the Indian Museum, Calcutta, on the 16th November, 1918, Mr. Raitt amplified these views and laid greater stress on them in the light of recent facts and figures. Mr. Pearson arrives at almost the same conclusion in his detailed analysis of the subject, and he definitely recommends the early establishment of paper pulp factories, one in Burma and the other in the Bombay Presidency.

The impending shortage of wood supply for paper and the urgent necessity of discovering other raw products with a view to keeping up the supply of raw material for paper and decreasing the present abnormal cost of the manufactured article are in fact recognised, and serious attempts are being made to utilize the Empire's resources in this respect. The Imperial Institute, London, has recently conducted a large number of experiments on the possibility of very many raw

materials hitherto untried in paper manufacture. Several kinds of grasses and straws from South Africa, the Federated Malay States, and Australia, were examined and reported on as suitable for paper pulp. A sample of clean rice-straw from Egypt was also examined, and it was found it yielded pulp of good quality suitable for white or brown paper and strawboards. It does not appear, however, that any rice-straws from India, which is one of the largest rice-growing countries in the world, were examined.

It will be seen from the latest published statistics that the relative values of papers manufactured in India and those imported during the five years ending 1915 were as follows:

VALUE IN THOUSANDS OF RUPEES.					
Paper produced in India.			Imported.		
1911	..	84,04	..	..	116,12
1912	..	77,06	..	..	135,83
1913	..	80,37	..	..	159,00
1914	..	82,12	..	..	142,00
1915	..	89,62	..	..	134,00

The value of imports increased by about 15 per cent. while that of internal production by only $12\frac{1}{2}$ per cent. Out of the total consumption of about 80,000 tons of paper, about 30,000 tons are manufactured in the country, and part of this again from imported wood pulp. It is complained that the competition of cheap wood pulp paper from Europe has checked the development of paper-making by older methods in India, and that the most successful mills are those which have contracts for Government supplies. But it has been shown by Messrs. Raitt and Pearson that the import of cheap wood pulp and wood pulp paper can be successfully defeated by the utilization of bamboos for making paper pulp at selected places near the sources of supply of the raw product. It is not likely that the present price of paper will abate to any appreciable extent. In these circumstances it may not be extravagant to hope that successful paper factories will be established at an early date by enterprising capitalists in the country, or by forward-looking governments. The present time is most opportune, and if the industry is not worked up to a high state of efficiency sooner than the world competition again sets in, there may be no hope whatsoever for local enterprise, except when the next crisis of shortage of raw products now largely used for paper actually arises. Evidences of state action in these matters of industrial construction are, however, ample of late, as can be seen from the initiative taken in the matter of the Madras pencil factory, the Calicut soap factory, and the Rangoon match factory by the much-maligned British Indian Governments, not to speak of our Mysore sandalwood oil factories, soap factory, etc. When so much is being done in and outside India for the successful utilization of bamboo and other suitable products for paper making, it is certainly not unlikely

that the matter is engaging the earnest attention of the Department of Industries and of the Special Forest Officer in Mysore, and before long the lay public may be surprised by the successful establishment of a large paper mill in the State, with a view to utilising the abundant supplies of bamboo, grasses, straws and other products suitable for the purpose.

To summarise the points raised in this article: (1) the climatic conditions of India require supplies of special kinds of paper for Government record purposes and for libraries; (2) the world's supply of raw products at present employed largely in paper making is getting short, and unless new sources of supply are tapped there may shortly be another crisis in paper manufacture; (3) it has been shown on expert authority, as a result of scientific investigations carried on for over half a century, that India has abundant and almost inexhaustible supplies of raw and waste products suitable for paper of all grades, and the natural facilities required to commercially exploit these resources; (4) all the necessary preliminary investigations and experiments have been concluded, and the time is quite opportune, not only as a result of these experiments but also in view of the present position of the world's paper-making industry and the prevailing prices for papers of all sorts, for starting and successfully working several paper and paper pulp factories in India, and for encouraging pulp-making as a home and cottage industry at or near the sources of supply of the raw products.

Attention may also be called to the latest authoritative pronouncement upon the subject—that of the Indian Industrial Commission (1916-18), in para. 64 of their Report. After taking into consideration the expert recommendations in the matter of utilization of the bamboo for making paper pulp on a commercial scale in India, and the hesitation on the part of private enterprise to undertake the industry owing to the fear lest the infant undertaking should be crushed by the dumping of wood pulp from Scandinavia and America, the Commission have arrived at the conclusion that there is a good case for a Government pioneer factory, which, whether successful or not, would at least provide adequate data to determine the commercial possibilities of bamboo as a source of paper pulp, when normal conditions are restored. The speedy resumption of competition of imported wood pulp in the Indian paper market is indeed very improbable, as the congestion of freight, added to the enormous reduction in the world's tonnage and the keen competition of the several trades to make good the war losses, will not allow of a large importation of paper pulp into India to bring down the price to pre-war level. In fact, it is feared that the price of paper may never go back to that level. In any case, there is urgent need for vigorous Government action in the matter, as pointed out by the Commission.

. C. NAGAPPA.

THE LANGUAGE PROBLEM OF INDIA

V.

THE STAGES OF LANGUAGE TRANSFORMATION.

THE broad lines along which, and the successive steps by which, language reform in India should proceed will now be apparent. In the first place, there should be a common written vernacular, and this *vernacular should be employed for all inter-provincial business and social purposes* for which the employment of English is not essential. In the next stage this common vernacular should supersede the local vernacular in all matters connected with business and public life within the province, the local vernacular remaining as the medium of domestic conversation and of local ballads and poetry. This stage may continue for a long time, and, in fact, for an indefinite period. Gradually in the course of centuries the common vernacular must supplant the local in these last fields also, and the one language ideal be attained in the fullest measure.

In India itself, and in Southern India particularly, the linguistic phenomenon of a double vernacular prevailing in Japan, as referred to above, is to be found amongst various sections of the population. For example, in Mysore it is common to meet people who have one language as the vernacular of domestic and familiar conversation and quite a different language as their polite colloquial. I have friends who speak Tamil at home, but who, if they are asked to write a letter in vernacular, cannot write it in Tamil but have to use the Kannada language. When I was on a visit to Chittagong, the Bengal district bordering on Burma, I could not in the least understand the dialect spoken by the Chittagong Bengalis. But the language of books and newspapers published in Chittagong, as also that of the notices and posters, were not only intelligible to me but they differed very little from the language used round Calcutta. These facts show clearly that the gradual restriction of one's own vernacular to familiar conversation, and the adoption of another Indian vernacular as the written vernacular and the polite colloquial, is not an unknown practice in India, and cannot be regarded as so repugnant to sentiment as to make it impracticable. In fact, if such a change has taken place amongst people in ordinary course, there is every

possibility of the process being expedited when it is clearly explained how important the change is from the point of view of progress and unity of the nation.

After all, it should be remembered that the task of learning a new language, specially one allied to the speaker's own vernacular, is not so difficult as is ordinarily imagined. My esteemed friend and colleague, the late Mr. Harinath De, whose knowledge of the different languages of the world was phenomenal, and who was one of the most eminent linguists of modern times, once told me that he did not require a stock of more than 100 or 150 words of an Indian vernacular to be able to converse in it with a fair degree of fluency. The same remark applies to other languages also. Thus "the English language claims to possess 1,00,000 words; yet an English field labourer gets along as a rule with about 300."¹ The different Indian languages have got a great number of words common to one another, and the difficulty of adopting a common vernacular is greatly exaggerated in the mind of the average Indian. But with the adoption of suitable facilities the process will be a comparatively easy one, and this aspect of the question deserves to be always kept in view and emphasised in any discussion of the question.

Then, again, it is important to clearly recognize that in adopting a common vernacular for India at the present day, a number of words will have to be borrowed from the English tongue into the stock of the common language. All vernaculars in India have borrowed largely from English, so much so that the English-educated Indian of the present day hardly finds it possible to converse in his own vernacular without a liberal admixture of English words. Even vernacular newspapers find it necessary to intersperse English words freely in their vernacular articles. Some vernacularists regret this mixture of vernacular and English. As the introduction of a crude and undigested foreign element resulting in a ludicrous and heterogeneous linguistic mixture, there is no doubt some room for complaint as regards the practice. It is absurd and ridiculous that a young educated Indian should be compelled, involuntarily by the force of habit, to use English words in the course of conversation, say with his aged mother perfectly unacquainted with English.² But as a question of deliberate linguistic policy there is much to be

¹ Ratzel, *The History of Mankind*.

² We know of numerous such cases. Of course, the speaker is oftentimes the first to recognize the absurdity of the situation, and after such discovery he makes laborious and involved attempts to express in defective vernacular what he expressed in English in the first instance. A most humorous instance of such inappropriate and inopportune mixture of English in conversation with persons who do not know English was related to me the other day. A young man belonging to a respectable family met his guru. After the usual operations of prostration and receiving of blessings, he informed the guru that he had failed to pass the examination for

said in favour of assimilating into the Indian vernaculars a large number of words expressing the new things and ideas that have come to us with the advent of Western civilization.³ It is, I think, natural and convenient and more beneficial to the vernacular in the long run to adopt English words in such cases, and incorporate them in the vernacular vocabularies rather than invent jaw-breaking Sanskrit synonyms with the help of Amara and Wilson.⁴ I remember how on one occasion a gentleman, a leading medical authority of Calcutta, who was writing a book on Sanitation in one of the Indian vernaculars, came to a friend well versed in languages, and held a consultation about the proper vernacular term to be coined for "vaccination." Many dictionaries were referred to and many authorities consulted; and after prolonged deliberation and rejecting a number of alternative

which he had recently appeared. The young man was not one of those students who take the result of examinations too seriously to heart, and from the tone of the disciples' speech the guru could not understand what the exact nature of "failing" was. He thought that the information so readily imparted him could not but refer to something creditable of which his disciple was proud. So the guru was pleased and broke out in his usual strain, "I am so glad that you have failed; that is exactly what I expected. Why should not one belonging to such a noble family as yourself fail? I know your father failed and your grandfather failed and all your ancestors failed" and so on and so on. The young man never felt the sorrow of "failing" more than when he had to explain in pure vernacular to the guru that by "failing" he meant that he was unsuccessful in an examination in preparing for which he had spent the best part of two years.

³ The adoption by one language of words originally belonging to another, proving as it does the fact of intercourse between two races, and even to some extent indicating the results of such intercourse, affords a valuable clue through obscure regions of the history of civilisation.—*Enc. Brit.*, Vol. II, page 115-16.

⁴ Borrowing, or taking in of material out of another language, has been more than once referred to above as sometimes an important element in language history, though less deep-reaching and organic than the rest. There is nothing anomalous about borrowing. It is rather in essential accordance with the whole process of language-acquisition. All our names were adopted by us, because they were already in use by others; and a community is in the same way capable of taking a new name from a community with which it comes in contact, as an individual from individuals. Not that it seeks or admits in this way new names for old things; but it accepts new things along with the names that seems to belong to them. Hence any degree of intercourse between one community and another, leading to exchange of products or of knowledge, is sure to lead also to some borrowing of names; and there is hardly a language in the world except of races occupying peculiarly isolated positions, that does not contain a certain amount of foreign material thus won, even as our English has elements in its vocabulary from half the other tongues in the world. The scale of borrowing is greatly increased when one people become, the pupil of another in respect of its civilization; hence the abundant classical elements in all the European tongues, even the non-Romanic; hence the Arabic material in Persian and Turkish and Malay; Hence Chinese in Japanese and Korean; and as a further result even the dead languages, like the Greek and the Latin and Sanskrit, become stores to be drawn up in the learned and conscious quest of new expression, which in the school stage of culture supplements, or even in a measure replaces, the unconscious growth of natural speech.—*Enc. Brit.*, Vol. XXI, page 422.

compounds' longer and still more difficult, they alighted on the word "*Gomasuriadhanam*." I, for one, should have preferred the English term to the difficult Sanskrit word. After all, a language gets enriched and nourished by additions to its vocabulary under suitable circumstances and in a systematic manner. The process is a natural one which has taken place in almost all languages of the world as the result of intercourse between different peoples, and nothing is to be gained by resisting with undue strain and artificiality the operation of this natural law.⁵

But the point which I want to emphasise about the borrowing of English words into Indian vernacular on a liberal scale is that these words will play an important part in facilitating the adoption of the one-language ideal for India. Besides the words which are common to the vocabularies of the various Indian languages, words borrowed from English will be a valuable common element linking the different provincial dialects to the all-India vernacular of the future.

Let us now look at the question of language transformation from the entirely practical standpoint. A newly-born child may be brought up so as to speak any language as its vernacular. Cases are not infrequent in India in which children have been brought up so as to be entirely ignorant of their parental vernacular. I know some Bengali families in which both the father and the mother are pure Bengalis, but the children are perfectly unacquainted with the Bengali language, speaking English and some Indian vernacular other than Bengali. The parents have lived in English style ever since the birth of the children, and have lived for the whole time outside Bengal. So the children have had no opportunity of learning Bengali, but they have learnt instead English and the vernacular for picking up which they had facilities in the circumstances of this living. Similarly, if by active measures undertaken by parents and educational authorities, facilities are created in provinces outside the Hindi area of India for children to learn the Hindi language, we may expect that in the course of one or two generations a considerable part of the population will be familiar with the Hindi tongue.

To illustrate the practicability of the change in a still more definite manner, we shall take the case of the Mysore State. Suppose the one-language ideal for India is definitely accepted by the Government and the people in all Provinces and States in India, and it is decided in Mysore to put forth the best endeavours to reach the goal in the shortest possible time. Suppose also the common language fixed

* Where races of a higher civilization come into contact with a lower, the language of the latter easily lapses into impoverishment, since it takes a number of words from the former. But then its impoverishment allows no conclusion as the degree of civilization, but can only be looked upon as a historical fact in the life of language.—Ratzel, *The History of Mankind*.

upon is Hindi. What should be the successive stages of the transformation? A beginning may be made at once with a change of script. It may be arranged that all Kannada works are to be printed in the Devanagari character in future, and for manuscript writing also Devanagari is to be used. For a few years in the beginning both characters may be used—side by side. But it should be definitely announced that after a certain number of years, say five years, the Devanagari character will be the only one used for writing and printing the Kannada language, and after the prescribed period the arrangement should be given effect to. Simultaneously with this change, Hindi may be introduced as an optional subject in all examinations, namely the lower secondary, the upper secondary and high school, and the university examinations; and arrangements should also be made for teaching the Hindi language in all educational institutions preparing candidates for these examinations. After a period of from five to ten years Hindi may be gradually made compulsory in all these examinations, Kannada being made optional. This process of adopting the Hindi language as the main vernacular for the purpose of public examinations should begin from the top. First of all, it should be adopted in the case of the university courses, then for the high schools and upper secondary classes, and finally for the lower secondary. By this means a considerable section of the population will get acquainted with Hindi in the course of one or two decades. After about thirty years the Hindi language may be adopted as the compulsory vernacular for primary classes also, and its use in courts, business places and social functions encouraged as far as possible. By these means it is not impossible to imagine that a complete transformation of the written and polite colloquial language of the State from Kannada to Hindi may be effected in the course of 50 to 75 years. Of course, these are not the steps suggested for actual adoption. The practical steps that may be taken and the order in which they should be adopted will be considered later on. The various stages are here indicated merely to show that if a well-organised and determined course of action is adopted it is quite possible to effect the transformation from the local to an all-India vernacular in the course of two or three generations.

It may also be mentioned that the transformation and its successive stages would be less radical and drastic in most parts of India than they appear in the case of the Mysore State in the illustration given above. In fact, it is the four major Dravidian languages of Southern India, *viz.*, Tamil, Telugu, Kannada and Malayalam, that present the most difficult front to a serious attack on the problem of Indian language reform. The transformation to Hindi from a North India vernacular like Bengali or Oriya, or from a Western India tongue like Maharati or Guzarati, will not be nearly so difficult as that from

one of the 'South Indian languages. The illustration that we have taken represents therefore the most difficult and unfavourable class of cases that may arise in giving effect to the one-language ideal for India.

There is every likelihood of energetic and effective action being taken all over India in the near future for the spread of education on a hitherto unprecedented scale. Not only is there every likelihood of primary education being made universal during the next few years, but the secondary and the university stages are also likely to advance by leaps and bounds. For when a nation has awakened to a sense of the necessity for educating itself, it is sure to get the education it wants; and indications are not wanting that such an awakening has come over the length and breadth of the Indian continent. The time is therefore ripe and opportune for taking up the solution of the language problem of India in an earnest and practical spirit. We have to decide as to whether the broad foundations of Indian education which are now about to be laid should be on the basis of ultimate linguistic fusion and unity of the whole population, or on that of further separation and crystallization of the numerous Indian vernaculars. From what has been stated in this and the previous articles, it must be clear that the adoption of a common vernacular is the only satisfactory solution of this difficult problem. We have tried to show that, from the anthropological, philological and historical standpoints, the one-language ideal is not an impossible one. We have also tried to show that under the present circumstances of India there are numerous forces at work which, if suitably utilized, may materially help in the attainment of that ideal. It is true, that language transformation in any Province or State cannot be effected in a moment, as if by the touch of a magic wand, by Governmental action or national impulse. But with a well-defined and a far-sighted policy, and the determined and patriotic endeavours of all concerned to carry it out on systematic lines, it would certainly be practicable to attain the ideal in the course of two or three generations.

In the next article we shall discuss the important question as to which language should be selected as the basis of the future common vernacular of India.

J. S. CHAKRAVARTI.

TRAINING OF ENGINEERS IN THE MYSORE STATE.

III.

IN our first article the necessity of an engineering college in the State was explained. The demand for higher education was growing and becoming irresistible, it was necessary to divert it to practical channels like engineering, industry, etc. The second paper dealt with the essential traits of an engineer's education. The engineer in all advanced countries was not only an expert in his professional work of designing, investigation and construction, but also a captain of industry, an organiser and administrator, and a business man on whom the material development of the country depended to a great extent. His functions were many-sided and his education scientific and broadbased. Capacity for action and application of principles were to form the primary characteristic of his education. But training had limitations in this country. The people were less wakeful and less strenuous than in many of the advanced countries, and led less eventful lives. The atmosphere was unindustrial, and education was more subservient to Governmental needs and less effective in the direction of private enterprise.

In this paper we shall proceed to develop on general lines the application of the principles set forth in the preceding contribution. The treatment will be necessarily sketchy, as technicalities have to be avoided to suit the general reader.

LIMITATIONS OF COLLEGE AND ACADEMIC EDUCATION.

To begin with, it is necessary to emphasise again the limitations of academic training, and to warn against undue hopes of what merely such training can achieve. Education in a school or college is but a small part of one's real education, which is acquired from anxious work and struggle amidst the shocks of life in the university of the world so to speak; and everyone desirous of success in action (this applies both to individuals and nations) should be a student of this university from birth to death. College education is but one step in the university of life.

ESSENTIAL FEATURES OF COLLEGE EDUCATION.

The main function of academic training should consist in laying the foundation of experience and action in a scientific manner,

and the rest must be left to that supreme factor, the human element—individual and national. Education is a means of forcing experience and getting access to its accumulated stores of ages, and of skipping over past blunders and trials. It should point to directions of work and fields of activity, and concern itself least with the acquisition of heterogeneous facts, except those incidental to the nature of training; rather the ability to think rightly and act vigorously, to follow up beginnings and particular bents of training, and to realise ideals should be the main aim, than actual knowledge of facts which cannot possibly be carried in the brain.

As regards an engineer's training, it should be broad enough to include a knowledge of the principles of the various branches of engineering. Few young men, especially in this country, have their future mapped out in advance, and their prospects in life depend a great deal on chance, and hence those with a general education in the various branches of engineering, supplemented with a somewhat specialised training in one, are likely to fare better than those whose training has been narrow and inelastic. One must be trained as an engineer first, and left to specialise in any branch in the school of life.

Thus the essential features of an engineer's university training should consist of fundamental experiences of all kinds in his profession and work—correct and practical habits of thinking, capacity for steady industry and the realisation of the seriousness and dignity of labour and common everyday work—the prosaic duties of life, so to speak, and a thorough and commonsense knowledge of fundamentals of the sciences and technique of his profession.

The ideals of training to be aimed at in a college having been defined, a brief indication of how they may be realised will now be attempted. The various means available for training and commonly adopted in all educational institutions may be grouped as under:

1. Explanation of principles by lectures.
2. Demonstration of their applications.
3. Fundamental practices and observations in the field, laboratory and workshop.
4. Some attempt at original investigation suited to his capacity on the part of the student.

To enter too much into details in this connection would lead to technical matter uninteresting to the general reader. A brief explanation should suffice to indicate what is meant. Lectures form the commonest mode of instruction and require no comments at length. Their main purpose should be to explain principles and broad engineering ideas in all courses. The aim should be a working knowledge of the several subjects taught, which they may serve as mental tools, so to speak, to be used in business, and in all cases (especially in mathematics) practical importance should take preced-

ence of those of a more theoretical nature, and bear on training as an engineer. Mental tricks and gymnastics, favourites of many a teacher and examiner, are dangers to be guarded against. In addition to class lectures, a course of practical lectures by specialists and experienced engineers should form a special feature of the course, such lectures being, if possible, illustrated by lantern shows and photographic illustrations. The importance and use of demonstrations illustrating lectures and leading to observations on the part of the student, are well known and require no special pleading. The essentials which should receive attention in this connection are: experiments which the student himself cannot carry on; handling and examination of specimens of materials, models of works and their parts; exhibition of the properties of materials, their manipulation and behaviour under the action of heat, stress, strain, shocks, etc.; observation of processes of manufacture of important materials; inspection of machines and their working; visits to workshops and engineering works of all kinds. In fact, the engineer should be brought as often, and as effectively as possible, in touch with illustrations of applications of principles.

The fundamental practices to be attended to are of a varied nature. The more important of them consist of methods of accurate measurements, surveying of all kinds—topographical, hydrographical, mining, road, railroad and city, including the use, adjustment and repairs of field and office instruments; testing of the strength of materials; location of engineering works of all kinds; workshop practices in the use, manipulation and limitation of tools in carpenters', foundry, smithy and machine shops; suitable and standard practices in the chemical, physical and engineering laboratories suited to the respective branches of engineering; drawing and sketching; computations; designs; original theses on some selected subjects, etc. The accumulation of primary data which will be gained through these demonstrations and practices constitutes some of the essential information which the student will be enabled to acquire for future practice as an engineer. A strong note of warning is necessary here. Just as dry lectures may lead to unassimilated and verbal knowledge, practices in the laboratory, workshop or field may easily degenerate into lifeless mechanical labour if they are not such as to lead the students to a grasp of principles and their applications. It rests with the professors concerned to impart life to such teaching, and their responsibility in the matter is great.

It should be pointed out at once that practical education of the kind indicated requires accessories of various kinds, without which life cannot be imparted to instruction. A good and well-equipped museum, laboratories and workshops, provided with suitable instructional and experimental apparatus and machinery, constitute indispensable adjuncts of training. A good library, professional literature of

all kinds, photographs, drawings and histories of important engineering works are also essential accompaniments of good laboratory equipments. Colleges in America and Europe are provided with such adjuncts on a very liberal scale. Further, it should be emphasised that access to laboratories and workshops should be not only free but compulsory, and should form a vital portion of training and not an incidental one.

It may be stated that the modes of training indicated are in no sense new, and are being attended to in all engineering institutions. The difference between training in one place and another consists in their application, and in the relative attention paid to the different aspects mentioned. Instead of the three main aspects mentioned receiving proportionate attention, lectures on theory are overdone in many institutions, and this is especially the case in mathematics and the theoretical portions of science. In fact, the majority of engineers feel, and have frequently expressed, that much of what they were made to learn has been of very limited use in practice, and that the so-called mental training resulting from them is considerably exaggerated. It is, therefore, the emphasis that is laid on the different aspects of training, and the success with which theory is made to subserve practice, that must constitute the essential difference between one mode of education and another.

EXAMINATION AND RECORDS OF WORK.

The manner of handling a student in the college and testing his efficiency and progress are no less important than the subject matter forming the basis of his education. The features which should characterise the college work of a student and modes of tests adopted should involve—

1. Continuous and steady application on the part of a student.
2. Records of his work giving ocular proofs of progress.
3. Tests to elicit grounding in principles.
4. Leading a student to be constructive and to do as much as possible by himself.

If college training is to form the real foundation of action and experience, the system of training and examinations adopted should ensure continuous application on the part of the student and thorough grounding in principles. The work of a student should be concentrated on a subject till he has covered it, till its principles have taken concrete shape in his mind. Records of his work should elicit what he has learnt and exhibit his progress ocularly as far as possible. The student should not be a mere passive listener to lectures, but an active worker under the guidance of professors. Mere lecturing, especially in subjects of a concrete nature, produces but intellectual cognition which is mere verbal cognition, and does not effectively influence the

student physically, emotionally and intellectually, and has little bearing on his capacity for action. If the results of instruction and training are to be telling, professors concerned must see and feel the student failing or progressing day after day ; the student must feel and discover that he is failing or progressing. The whole course must be a system of tests or examinations, tests without causing strain, to discover a student's steady development and progress, and not of the type of public examinations we are having in this country. The modes of training and examinations which have been evolved and are in use in American and Swiss universities seem well suited for securing real efficiency. The principle underlying all tests and examinations is the same all over the world, and it is the mode of application of the principle that differs, and proper application is everything. The system of examination adopted in India and many other places is similar in type, and seems antagonistic to real education in many ways. A sense of rigidity, strain and stress pervades the whole system, and the atmosphere and traditions are those of over-developed and over-emphasised *public examinations* at long intervals. Tests in a large number of subjects are crowded into a few days at such examinations, and the student's all is at stake, there being no chance of retrieval except through a similar ordeal. Instead of encouraging steady and continuous industry, the system encourages work by fits and starts, and lays the foundation of fundamentally wrong habits, as the students have not sufficient stimulus for continuous work. In fact, it has become the habit of students to slacken efforts during the earlier part of their course, and crowd preparation into a few months before examination. The result is verbal cognition (which is the serious danger of all school and college instruction to be guarded against), unavoidable cramming, waste of mental energy and ruin of many a promising youth. We have become accustomed to the belief that many of our young men are born to be failures. The subject is a difficult one, and requires separate treatment to avoid giving room for misapprehensions. It should, however, be emphasised that the system of training and examination, at least in the case of professional and practical courses, should be overhauled.

POST-GRADUATE TRAINING.

Even after a satisfactory completion of his academic training, the student stands in need of assistance to start him in life, and post-graduation of a suitable kind is necessary to make college training effective, to bring him in touch with particular applications of his education, and to initiate him into the forms of business and routine. A great deal depends on the student himself at this stage. Those who are ambitious of reaching the top of their profession, and can afford the expenditure, would do well to apprentice themselves to practising

engineers, workshops, or commercial concerns (as in the case of law), should begin low, and fight their way up. This stage of the life of an engineer is very important, and his career will mainly depend upon how he utilises his opportunities for practical work. Visits to foreign countries and suitable apprenticeship in the concerns there, form some of the best fields of training, especially for those specialising in electrical and mechanical engineering. Foreign travel, or at least travel over a large part of India, is another educative force which may be profitably insisted on at this stage. But the Indian student can do very little if thrown on his own resources for post-graduate training, as adequate facilities are not available in this country for this purpose. In fact, the impulse of Governmental agency is the chief motive power, and Governmental organisation practically the only organisation available for help in this country. Hence, for a long time to come, the burden of training at all stages should be on its shoulders. Some of the best young men should therefore be sent to foreign countries for practical training at Government expense, especially in mechanical and electrical engineering, while others should be sent on works or to workshops in this country. In this connection it is necessary to draw attention to one precautionary measure applicable to technical education. It is the practice of many of our young men to go to foreign countries for college training; but it seems to the writer that theoretical grounding of a fairly efficient nature can be easily arranged for in India itself, and that no great advantage is likely to be secured by our young men going outside India for college training. Probably time and energy will be best utilised if students are sent to foreign countries solely for post-graduate training, and to learn practical work, especially in mechanical and electrical engineering, for which facilities are wanting in India. After the completion of academic education, they will have reached to some extent the maturity of judgment necessary to acquire experience, and, being freed from the narrow and distracting influence of examinations, their apprenticeship will be far more effective.

EQUIPMENT AND FACILITIES REQUIRED.

The necessity for these has already been pointed out. A few words will be added on the types of equipment which are needed for college work. The principles to be kept in view are facilities for instruction and experiment to the students, and opportunities for research work, and improvement of professional knowledge for professors. Facilities for research work, and for reaching a higher level of efficiency for professors, are wanting in this country, and this aspect of the question is a factor to be borne in mind in the provision of equipment and laboratories. Further good laboratories and workshops form a good means of creating an engineering atmosphere which is

more or less lacking in this country. The nature of equipment and apparatus to be installed is not such as will be required for commercial concerns, but standard types of all kinds suitable for illustration, experiment and instructional and research purposes.

FUTURE DEVELOPMENT OF THE LOCAL COLLEGE.

A few lines may now be added on the question of the future development of the local college. At present, the University of Mysore has decided to impart instruction in three branches of engineering, *viz.*, civil, mechanical and electrical. The introduction of mining engineering is also under contemplation. When proper facilities have been developed for successful instruction in these branches, a course in industrial engineering is very essential and may be added. The principles underlying instruction in this branch are well expressed in the following extract, which will give an idea both of its importance and necessity to the country : "The actual practice work in each case is supplemented by classroom work, where the advanced practice in all lines of manufacturing work will be considered. Current questions dealing with new methods of manufacturing will be discussed in detail. The material for such work will be taken largely from the technical papers. Parallel to the work in the shops and to the work in shop practice there will be given a thorough course in the economics of manufacturing. This work includes discussion of all factors directly influencing the design, location, arrangement and economical operation of manufacturing interests. Financing, organising advertising, selling are given special attention. Departmental routine and operation, including a comprehensive study of special and economic conditions affecting employees, are included in the work in this department. In all of the work included in this course conditions will be studied, wherever possible, as they are actually being carried on at the present time. This is accomplished by numerous visits to industries, where the operation of any special condition can be noted."

This branch of engineering requires grounding in mechanical engineering, which is already provided, and its introduction should be easy in the near future. As the college develops it should be possible to introduce facilities for specialisation in railway, sanitary and municipal, town planning and architectural engineering. However, the extensions indicated can be but gradual, as questions of cost, accommodation, equipment, poor prospects of employment, etc., are serious obstacles in the way of any rapid development in these directions. Moreover, attempts in too many directions are distractions which should be avoided in the present stage.

These hasty and imperfect sketches must, for the present, be brought to a close. The ideals set forth may appear difficult to realise, and some, at least, who go through these notes will think so. The

writer, however, believes that the strain of necessity is rousing India, and that she is awakening to her industrial shortcomings. Since technical education of the right kind forms one of the prime levers for remedying her backwardness, this aspect of education requires energetic handling for a long time to come. Difficulties which beset our path may be staggering, but nothing drops ready-made from the clouds. Difficulties should only harden strong and virile natures. If these truths are realised, and if there is sufficient virility in the country to respond to the stimulus of necessity, success will not be difficult.

K. R. SESHACHAR.

MR. RUDYARD KIPLING.

RUDYARD KIPLING AND INDIAN READERS

MR. RUDYARD KIPLING, Nobel Prizeman for Literature, was born on the 30th December, 1865, in the city of Bombay, of which he speaks with pride :

“ Mother of cities to me,
For I was born in her gate,
Between the palms and the sea,
Where the world-end steamers wait.”

To-day in the struggle of the mighty war which is passing, the pages of Mr. Kipling's writing have afforded the greatest comfort to the fighting warriors. Nor, indeed, has the poet himself rested his pen during this time. His “Sea-Craft” has already taken for its portraiture the grim watching of the British sailor over the dismal waves where the German submarines have offered the dreadful chase.

Kipling is insufficiently known in India, and he is misunderstood as well. Indeed, it would be difficult to state which is the greater, the misunderstanding of him or the ignorance of his work, to such a degree has one acted on the other. The misunderstanding began with the frequent misleading way of quoting from his famous ballad the line :

“ Oh, East is East, and West is West, and never the twain shall meet,”

with the scrupulous omission or ignorance of the succeeding lines :

‘ But there is neither East nor West, Border, nor Breed, nor Birth,
When two strong men stand face to face, tho’ they come from the ends of the earth ! ’

Very few people probably know that these lines conclude a most exciting narrative of an Indian frontier episode, in which a valiant Border chief exchanges his place for a man of the Guides in the British army.

The charge against Kipling is that he never pictures real Indian life, having never himself been amidst it. He is the poet of trifles, of transient official bits, and the accidents of English exile in India. He is a special friend of “Tommy,” and has written largely of his barrack-life. The Indian reader, never having known barrack-life, can hardly appreciate reading about it. But in this time of war Kipling's fondness for “Tommy” will make a special appeal to readers. It is all very well in peace time to say :

"It's Tommy this, and Tommy that, and chuck him out the brute,"
 but when war is proclaimed, and the drums begin to beat,
 "It's a thin red line of 'eroes."

Tommy does not wish to be so suddenly flattered up :

"We aren't no thin red 'eroes, nor we aren't no black-gurds too,
 But single men in barricks most remarkable like you ;
 An' if sometimes our conduct isn't all your fancy paints,
 Why, single men in barricks can't grow into plaster-saints."

Such is the rationale of the soldier's life. What a pity that the soldier's life should so unhappily be marked off from the rest of the citizens of the State ! How can the national sense and the national responsibility be brought home properly to the citizen, if the sacred task of national defence is to be for ever associated with the lower classes of society !

Kipling's appeal to Indian readers will, however, rest much more securely on some of the most fascinating pictures he has drawn of Indian scenes, of inanimate nature as well as of human life, the natural scenes especially being of the loftiest and the purest Indian setting. The *Jungle Books*, both the *First* and the *Second*, have a perennial charm for all readers, and a special added one for Indian readers. The stories are of the jungles of Himalayan regions, and in the animal-characters Kipling has blended the freshness of individualisation with the laws of zoological science in the rarest delicacy and fancy. The stories may remind us of the Tales of the Panchatantra, or of Æsop, and they seem to surpass all these. The humour of Kipling is unsurpassed. The ease of his animal-character delineation, and sustained history of the events of his quadruped republic, are of a kind nowhere else attempted. The cynical stork, standing on one leg, with one eye closed ; Bhageera, the benevolent tiger ; Hathi, the king of the forest ; Baloo, the oldest citizen and teacher of the Jungle Laws ; have all a distinctive existence in the mind's eye. Impudence is a development in Kipling based on the traditional cunning of the jackal :

"In August was the jackal born ;
 The rains fell in September ;
 'Now such a fearful flood as this,'
 Says he, 'I can't remember !'"

The names of Kipling's animal-characters, almost all of them being of Sanskrit, have a special charm of their own for the Indian reader. Hathi, the elephant ; Nag and Nagaina, the serpent couple ; Chil, the kite ; and Kala Nag, who had served the government for forty-seven years—how in the fitness of things the names have been chosen !

A very delicately-told human story in the Himalayan background of forests and wild animals is that of Purun Bhagat. He is the

accomplished Dewan of the Indian State of Mohiniwalla, the very cream of the new learning and education in his country ; one who had had his own share of being lionised in London society, and who, even as he reached the very pinnacle of his earthly glories, abandoned them suddenly to find peace in quiet contemplation in the solitude of the Himalayan forests in the evening of his life. After years of solitary existence there, Purun Bhagat acquires a new magnetism. The wildest and fiercest of the forest denizens are so softened by his peaceful soul that they all love and follow their Orpheus like kids.

"Kim," the story of the Eurasian gamin, has abundance of Indian life in it. The scenes move kaleidoscopically, and the impression may come that Kipling, while perfect master of the spectacular details of life, knows little of the deeper human promptings behind them. However that may be, Kipling's keen power of observation is nothing less than marvellous. He points out that the native life of India is essentially democratic, not the democracy of the ballot-box, but the sweeter, touching, human democracy of social life, where man meets man freely and profusely. He tells his tale, and utters his secrets confiding in all, and asks for the confidences of others, with none of the reserve or the insulating barriers of the polite codes of manners more generally associated with Western society. Speaking again of the houseless, wandering Sanyasi, he says: "So long as there is a morsel to divide in India, neither priest nor beggar starves." The Lama in search of the River of the Arrow, who figures throughout the story of "Kim," is a touching creation of religious emotion, when he is not, as he frequently is, dragged into the realms of the burlesque. The quest itself has all the suggestiveness, charm and homeliness of the Three Destinies of Nathaniel Hawthorne.

Whatever the limitations and eccentricities of Kipling may be, the creator of Mowgli and his jungle companions will always claim a lasting tribute of praise from Indian readers. The exulting voice of Imperial Britain is not empty, but sheds illuminating side-lights on the race-progress of human peoples.

P. R. KRISHNSAWAMI.

REVIEWS OF BOOKS

Economic Studies. Edited by Gilbert Slater, M.A., D.Sc. Volume I, "Some South Indian Villages." Oxford University Press, 1918.

This is the first of a series of *Economic Studies* issued under the patronage of the University of Madras, and edited by Dr. Gilbert Slater, Professor of Indian Economics in that University. We are prompted to congratulate the University of Madras on this very creditable result of the policy recently initiated of appointing a few professors working directly under the University. A university which confines its work to examining and imparting knowledge, and makes no pretence to extend the bounds of knowledge by encouraging research, is neglecting one of its primary duties. But, unfortunately, until a few years ago our Indian universities practically confined themselves to the discharge of only one function, that of examining. But a change is being slowly effected by the appointment of university professors in the older universities and the rise of small teaching universities. In many instances the appointment of professors by the older universities has been particularly fortunate, for the ingathering of their first fruits of research work has been decidedly encouraging. Such work is all the more welcome because India knows so little of it, and yet needs it urgently in view of the great industrial changes which are pending. Without disparaging other branches of research work, there can be no doubt of the supreme importance of economic research in the present critical times in India. The appearance, then, of a book on the economic study of "Some South Indian Villages," based on research and first-hand knowledge, is a gratifying fact, and we felicitate the University, the professor, and his small band of ardent youthful coadjutors.

The book is portentously heavy—but we refer only to its actual weight. Apart from that, the get-up of the book is everything which can be desired. It is durably bound, the paper is of the finest and thickest quality, and the type will satisfy the most fastidious. There are thirty full-page photographs illustrative of rural life and industries, finely executed and pleasing to the eye. We think the contents are equally satisfactory, except, perhaps, that Dr. Slater, the Editor, modestly restrains himself to some twenty pages of

Introduction and fifteen pages of concluding Observations, and throws the burden of the main contribution to the book on a dozen or so of university honours students. But while it would have been no infliction on his readers had Dr. Slater been more generous in his own contribution to the book, we are not disposed to find fault with his distribution of the work. For it is a significant and pleasing novelty to find that the success of the book—we are sure that Professor Slater will be the first to confirm the statement—is largely due to the labours of his students. Indeed, it is on their researches and investigations that the professor bases his generalisations, and it is their work which constitutes the *raison d'être* of the book. This, we think, is a unique experience, an experience the more remarkable because it is the poor, depreciated Indian student who is responsible for it. This is an achievement of which Dr. Slater may be justly proud. He has set the feet of his young students in the right direction, he has fired and yet regulated their enthusiasm, and the result has fully justified the ingenious experiment which he conceived. Let not the advanced reader superciliously think that a book, three-fourths of which has been written by young graduates and honours students, need not engage his serious attention. That would be foolish in the extreme, for here are facts laboriously and logically brought together by which he can test theories and generalisations, some true and some false, and all more or less lacking a sure foundation of fact. Moreover, the information thus brought together by many hands, from diverse and distant quarters in the space of a single summer vacation, is such that no one man could hope himself to collect in the course of years, far less months. Each student contributor was intimately associated, some by birth with the village whose conditions he describes. To one man investigating singly, and ignorant of the different languages in use, a stranger and a foreigner, such intimacy would be impossible. Dr. Slater, on taking up his appointment as Professor of Indian Economics, determined to direct the attention of his students towards the economic study of villages which were most available to them. To help them he drew up a "Village Questionnaire"—a book of questions, spaced fairly liberally, interleaved with blank pages, and he devoted some study in deciding what questions to ask. The kind of questions asked can be gathered from the answers which the students recorded, and from the scheme for the survey of a Ryotwari Village drawn up by Professor Slater. Under this scheme come the following heads, each of which is followed by a number of items, to furnish the information for which must have necessitated a very intimate knowledge of the village and its conditions: population, land, occupation of land, agriculture, the village, subsidiary industries, village trade, economic condition of village, sanitary condition of village, education,

village administration, history and prospects of village, and general. The result is a systematised amount of detailed, interesting and useful information for which we might look in vain in any Government survey or census. In turning over the pages at first sight, the prospect of being interested in the context is remote. But one has only to read through a single survey to realise the remarkable insight it gives into the life of a village, and to make one anxious to read another survey to see how far the conditions correspond or differ from those already studied. The occasional quaintness of the language, too—for the investigators are not professional men, only keen young amateurs—and the frequent evidence that the writers are startled for the first time by facts the inner meaning of which they had never before grasped, give an added interest to the book. It is difficult to over-estimate the value of the moral and intellectual discipline to which these young men must have been subjected in their efforts to record clearly and logically facts and conditions with which they had long been sub-consciously familiar, or the satisfaction they must have enjoyed from the thought of a well-spent vacation in which they had actually done something besides poring over books or listlessly passing their time. This is the kind of awakening which young India most needs, an awakening which connotes an active and participating interest in local economic surroundings. That Dr. Slater should have succeeded in arousing and sustaining such interest redounds greatly to his credit, and we trust that he will continue to lay stress on the importance of associating economic practice with economic theory in his dealings with his young students. The book before us deals only with the economic study of south Indian villages, but that does not exhaust the subject of investigation in a country like India, whose economic research slate until recently was immaculately clean. In this review we feel we can only properly discharge our duty by emphasising the outstanding feature of the book—the association of the learned editor with his honour students in the field of practical economics.

But the book would not have justified publication had it stopped short with these investigations. We look for some tangible result, some conclusions from these individual and isolated researches. Unfortunately, the number of villages inspected was small, were not always typical in character, and were spread over vast areas. Dr. Slater is too experienced a scholar, too much a man of the world, to draw definite, general conclusions from such material. He feels that investigation must be extended, particular problems further proved, and of these latter he gives more than one instance. The indebtedness of the peasants seems universal. But it is startling to find how prevalent is the 'padial' system, a sort of serfdom, or hereditary dependance on land owners, due to debt incurred originally by borrow-

ing a comparatively small sum—generally for a marriage. “Such a loan never is repaid, but descends from one generation to another; and the padials themselves are transferred with the creditor’s land when he sells it or dies.” It seems incredible, but it is mentioned as an ordinary fact by one investigator after another. Labour, if ill paid, is correspondingly inefficient, and Dr. Slater gives as an illustration the ineffectiveness of reaping. The danger from over-population is emphasised, especially in view of the steps which are being taken by sanitation and better medical attendance to check preventable diseases. The resources of a village to meet an increase of population are few, but at present emigration meets the difficulty. As regards the poverty of the people, the author concludes, so far as the Carnatic plain is concerned, “that India is a very rich country, inhabited by very poor people.” His estimate for the average income per head in the Madras Presidency in 1916-17 is the high one of Rs. 72, *i.e.*, nearly £5. The official estimate for the whole of India was only £2. The difference is so great that Dr. Slater’s estimate warrants examination. Indian religion, philosophy and family life do not conduce to a higher standard of living. “In fact, various strands of economic, social and religious conditions and customs are strangely and deftly interwoven in the web of south Indian life, and low wages, low efficiency and high abstinence are the ground plan of the pattern.” To the vexed question of the incidence of the land revenue Dr. Slater devotes much space, and with the help of a number of facts derived from his and his students’ survey he arrives without hesitation at a conclusion which will not be acceptable to those who hold that the land taxation is unduly severe. The trouble is, according to Dr. Slater, that the taxation is unduly lenient, and “the more the State allows the *pattadar* to appropriate, the more convinced the *pattadar* naturally becomes that he is by right the full and not the part owner of the land he holds.” Theoretically Dr. Slater might have strengthened his case by an examination of the results which would follow the total remittance of the land tax. But he has said more than enough to induce a rejoinder from such associations as the Madras Ryotwari Association. The subjects of local congestion and fragmentation of holdings need more light than the present volume is able to give. But we should be grateful for the approximate conclusions reached on these and other subjects in this interesting book.

Introduction to the Study of Indian Economics. (Second Edition.)

By Vaman Govind Kale, M.A. Price Five Rupees. Aryabhusan Press, Poona, 1918.

· This is the kind of book of which we use to dream when, many years ago, we were struck with the peculiar economic conditions of

India, and the entire absence of literature dealing with the application of the principles of Political Economy to the special needs of this country. Then came the late Mr. Justice Ranade's *Indian Economics*, a book which served as a trumpet-call and an inspiration. But it was not the book of which we dreamt, for it consisted of a series of masterly essays exposing the futility of applying the principles of the so-called orthodox school of political economy to a country so economically backward as India. This it did in general terms, and, apart from the subject of the need of the paternal care of Government for the growth of nascent industries, it left untouched the discussion of many economic problems which are of the first importance to India. Ranade's book, however, served its purpose by making a profound impression on educated public opinion in India, and by inspiring some of the best intellect to make a serious study of Indian economics. The Indian universities began to give special attention to the subject, and in several cases appointed Research Professors in the subject. There has been, too, an increasing flow of students to England who have already specialised in economics in this country, and who, after further study under the best teachers abroad, are applying their knowledge to the peculiar economic conditions of India. Although Indian economic literature is still scanty, there has been a relatively large output in recent years, and the names of Banerjea, Mukerji, Morison, Mann, Jevons, Slater, Joshi and Kale will, among others, suggest themselves to those of our readers who are interested in the subject. We are hearing a good deal of the so-called Renaissance which is in progress in India. That term is a significant one, and it is an open question whether some branches of knowledge are at present sufficiently developed to justify their inclusion in such a movement. But there can be no doubt as to the propriety of including in the movement the stir which is being made in the study of the subject of Economics in their application to India. But in this connection the term Renaissance is somewhat misleading, inasmuch as the present study of economics is the result, not of a new birth or revival, but of a primary birth. Nothing is more hopeful for India at this crisis than that some of the very best intellectual vigour of the country should be concentrated on the subject of economic and industrial problems. Other Asiatic countries which are conscious of modern ambitions are also making a study of economics with special reference to their own conditions. At the Tokio University, in Japan, the subject is a serious and popular one, and we remember well the impression made on us by the large number of second-hand English economic classics which we found in the book shops in the neighbourhood of the university, and which had been laboriously annotated by students in English and Japanese. It is the same in China, of which country so

far back as the eleventh century, we are told by a Chinese writer, that, under the influence of Wang-Au-Shih, known as the Reformer, "even the pupils at the village school threw away their text-books of rhetoric, and began to study primers of history, geography, and political economy," in their newly-found zeal for a knowledge of practical subjects. Indeed, throughout the world, the cry at present is for more practical subjects in the curriculum, and among these the demand for economics stands high.

Professor Kale's book is entitled, *Introduction to the Study of Indian Economics*. It is not, therefore, a general handbook of economics, of which there are many, but a handbook of Indian economics, of which there are none too many. The book has deservedly reached a second edition. It runs into over 500 pages. The type and paper are good, and, considering the amount of excellent matter and the present cost of material, the price of the book is remarkably low. We have enough of the Swadeshi spirit in us not to wish that such books like Professor Kale's should be printed and published outside India. But we venture to say that the book before us would readily have found an English publisher, who would certainly have issued the book at double its present price. Professor Kale is a member of the Fergusson College, Poona, an institution which spells self-sacrifice and devotion to the interests of India on the part of its staff; and doubtless the author is primarily concerned to see his book economically produced and widely circulated with a view, not to profit, but to the spread of the knowledge of the principles he inculcates. The merits of the book are such that we consider it the duty of every educated Indian, who is intelligently interested in the welfare of his country, to become possessed of this citizen's guide-book, or handbook, to the subject of Indian economics.

In the present edition the chapters of the first edition have been expanded "for the purpose of a more comprehensive discussion of certain important questions." "The effects of the extraordinary conditions created by the war have been shown in different places, and an attempt has been made to bring the book up-to-date." There is no question as to the comprehensive, impartial manner in which important economic questions have been discussed, and facts and figures are often given for so recent a date as 1918. We admire the note of moderation throughout. The language is moderate, the English is generally excellent, and the style has the scientific cachet suitable to the discussion of such a subject as economics. The author's main contention is that India should enjoy fiscal autonomy, and to secure this India must have her due place in the reconstructed Empire. With a system of preferential tariffs Professor Kale will have nothing to do. England does not want them for herself, and India in matters economic wants an

entirely free hand. After all, the claim has been made, not once but many times, by the Government of India itself, only to be rejected. by the Secretary of State. With the appointment, for the first time, of an Indian as Under-Secretary of State for India, economic questions which primarily concern this country may henceforth be decided in the interest of the latter. In the interesting chapter on the "Indian Outlook," the author combats the view that the teachings of Hindu religion and philosophy unfit the people for a competitive struggle with more materialistic nations, and that they are the primary cause of India's poverty and low standard of living. But he admits that "social institutions, like those of caste, may impede progress for a time," though he thinks "they can be and have been moulded to suit changing conditions." In support of his case he evidences India's commercial prosperity in the past. But in face of the low standard of living and the high abstinence which prevail, and which are in keeping with social customs and the disciplinary principles of religion and philosophy, we think there is more in these conditions to account for India's material backwardness than the author is inclined to admit. But here, as generally throughout the book, we cannot but admire the optimistic note of the author, a note which is based largely on the hope that the fiscal autonomy of India will be realised. It is impossible to deal with the many debatable topics of this book. They are stated fairly and from all points of view, for Mr. Kale is not afraid to give the views of those with whom he disagrees. Special praise is due to the chapter which deals with high prices in India and with Mr. Datta's official report on the same. The currency and banking chapters are also good. There are some misprints which should be eliminated—page 39 is given as '89,' 'well' for 'will,' 'supercede' for 'supersede,' etc. There is a good Index, and in addition a very useful analytical Table of Contents. It would have been helpful if the analysis had been repeated at the head of each chapter. A goodly list of authorities is given with each subject, and these are quoted throughout. Altogether the book does the greatest credit to its author, and he has rendered a great service to India by its publication.

Echo Personalities. By Frank Watts, M.A. London, George Allen & Unwin, Ltd. Four Shillings and Sixpence Net.

The alternative title of the book, though a bit long, well explains its scope: "A short study of the contributions of Abnormal Psychology towards the solution of some of the Problems of Normal Education." The book is divided into five chapters: the Scope of Abnormal Psychology; the Crowd at School: its control and education; Psychopathology and the Development of Personality; the Psycho-

logy of the Defective Mind: its influence upon teaching methods; the Supernormal Mind. The author does not pretend to make any original contribution to the fascinating subject of Abnormal Psychology, but even as an epitome of the recent investigations his work is most welcome. Text-books on what is ordinarily called Psychology give a very scant consideration—if any at all—to topics of Abnormal Psychology, and so these are not known so well as they ought to be. They need to be widely popularised, and Mr. Watts' book will supply a need. His views on education are very sane and sound, especially his criticism of Dr. Montessori's method. He insists on the necessity of impressing healthy principles on the minds of children, instead of the absurdity of those "advanced" people who wish children to be brought up with an "open mind," *i.e.*, who withhold all healthy ideas from them, so that they may have the precarious satisfaction of discovering these ideas by themselves! Mr. Watts recognises the difficulty of defining the limits of abnormality, and we are glad he resists the temptation of lumping together the subnormal and the supernormal under the abnormal. The last chapter in the book is a very brief one, but serves well as an earnest of another book on the subject "... these and other questions of a kindred nature will be the subject of another volume, if the reception of the present one indicates to the author that his further work would not be superfluous." We trust the author will be encouraged by the reception of the book under review to fulfil his promise of writing another volume on the supernormal mind and other kindred topics.

A. R. W.

The Metaphysical Theory of the State. By Professor L. T. Hobhouse, D.Litt. London, George Allen & Unwin, Ltd. Seven Shillings and Sixpence Net.

Anything that comes from the distinguished pen of Prof. Hobhouse may safely be expected to be good, and his latest volume does not disappoint our expectations. It is a very acute criticism of the idealistic theory of state, especially as propounded by Hegel and Dr. Bosanquet. It need not detract from the merits of the book, however, if we say that a good deal of this criticism is misleading and unjustifiable, as Prof. Hobhouse has been an anti-idealist and has approached the work of Hegel with a great amount of bias. To his temperamental difference in the angle of vision has been added, unfortunately, the bias produced by a devastating war. The book has been written in an atmosphere continually perturbed by the thunder of guns. It is, perhaps, a natural transition from this—though hardly logical—to make somebody a scapegoat. Nietzsche, and Treitschke and Bernhardt have been criticised to tatters during the last four years. Prof. Hobhouse must needs go a step further back, and haul up Hegel

as a traitor to humanity ! Referring to Hegel's philosophy of freedom and of right, the professor pens a sentence which requires a great war to save it from being utterly ridiculous: "In the bombing of London I had just witnessed the visible and tangible outcome of a false and wicked doctrine, the foundations of which lay, as I believe, in the book before me." Prof. Hobhouse has devoted one volume to a criticism of Hegel and his followers. It will require another volume to deal adequately with Prof. Hobhouse's own criticisms. The chief criticism directed against Hegel is his conception of freedom, and his treatment of an individual state as the ultimate repository of power. Prof. Hobhouse's own conception of freedom follows the traditional English view that it essentially means freedom from restraint. If this view were consistently developed, we would be bound to end either in a philosophical anarchism or those hopeless inconsistencies, of which Mill's essay on "Liberty" is a standing monument. As regards Hegel's conception of state, his position is fundamentally correct though in a good many places it would be necessary to restate his views in language more in harmony with the spirit of his thought. This has been actually done by T. H. Green, and we are glad to note a recognition of his merits from such a hostile critic as Prof. Hobhouse. Dr. Bosanquet's views are also fundamentally the same as Green's, though he is rather unfortunate in emphasising the conception of force in connection with his idea of the state. This has always appeared to us as an error in language and emphasis, more misleading than real, and this has now been made quite clear in his (Dr. Bosanquet's) new volume, *Social and International Ideals*. The chief grievance of Prof. Hobhouse against the idealist theory of state seems to be that he somehow interprets it as making force the centre of it. No idealistic philosopher has really been guilty of this error. Even when misconstrued and misread, his emphasis on force pales into insignificance before the brutal deification of force in the pages of the Englishman Hobbes' *Leviathan*. If some individual prior to Treitschke must necessarily be made a scapegoat for this war just ended, Professor Hobhouse would have been more consistent if he had pilloried Hobbes as responsible for "the bombing of London." Perhaps after a few years, when the passions of men have been cooled down and can once again take to a dispassionate study of political truths, Prof. Hobhouse will find that if the League of Nations is to be a real force in the maintenance of peace, the problem of its organisation will have to be solved on the basis of the profoundly ethical intensity which underlies the idealistic conception of state. It must be admitted that some of Prof. Hobhouse's criticisms are very suggestive, and if in the light of these criticisms the idealist theory comes to be modified here and there and restated to suit the political needs of the present day, he will have done a real service

to the cause of political philosophy, and of the idealistic political philosophy in particular.

A. R. W.

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The Relationship Between the Mystical and the Sensible Worlds.

By Herbert N. G. Newlyn. London, George Allen & Unwin, Ltd. Four Shillings and Sixpence Net.

Mr. Newlyn does not claim any extravagant merits for his book. "Suggestiveness, rather than exhaustiveness, has been my aim," he writes in the preface, and it is from this standpoint of suggestiveness that the book must be appreciated. One can sympathise with the desire of the author for a study of mysticism on scientific lines. Yet there is an inherent weakness in mysticism which it is difficult to transcend. It is a peculiar experience, peculiar to a few. Thus the reality of mysticism rests on the experience of a few mystics. They, in their turn, give expression to their experience in language more literary than philosophical, and this is inevitable for mysticism is essentially—if anything at all—superintellectual, and does not admit of a philosophic discussion. The book under review, in spite of all the honest efforts of the author to be scientific and philosophical, is at bottom dogmatic. It would, however, be unjust to press this defect, as it is inherent in all mysticism. Belief and disbelief in mysticism are, at bottom, dependent on one's spiritual or anti-spiritual temperament, and thus some people will believe in it with all the passionate conviction of their nature, and others will be sceptical. It is the immediate intuitive intensity of mystic experience that can alone explain the fervid enthusiasm of mystics. The language of mysticism is through and through the language of poetry. Even our author is at his best when he ceases to be scientific and lets his enthusiasm break out in a poetic vein. Let his discussion of immortality, on pages 78-79, speak for itself: "He will awake to life unspeakable. And his past will be borne in his being. All shall see and know and recognise him. No soul shall pass him by. In a glad and beauteous throng all share in unison the great Divine Need, for so it has now become, and all for each other provide the Divine Context. The richness of their life is in their Association. The glory of their being is in the oneness that embraces them. No word is spoken; no end is sought. Fulness rests upon all before desire expresses itself. Joy bestows its silent beauty ere thought have framed its name. Love yields a radiant glory ere soul is opened to its flood. In all and over all is peace. Life is lost in experience. Many are wrapt in One. Each is lost in All. None is alone. God is all." Philosophy may find its consummation in mysticism. But mysticism as such cannot be philosophical, for philosophy is essentially intellectual, and mysticism is anti-intellectual. To criticise mysticism from the standpoint of science or philosophy

would be ungenerous. To appraise it in extravagant terms would be dogmatic. Mysticism is to be enjoyed, not to be dissected into fragments. Mr. Newlyn could not have chosen a more difficult subject to write on. But all in all, considering the difficulties of the subject, he has performed his task well and in admirable spirit. A. R. W.

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*The Philosophy of B*rr*nd R*ss*l.* Edited by Philip E. B. Jourdain. London, George Allen & Unwin, Ltd. Three Shillings and Sixpence Net.

To the vast generality of readers philosophy is a very "sage and serious" subject, which cannot possibly lend itself to a comic treatment. But the book by Mr. Jourdain is a most comic account of the philosophy of Mr. Bertrand Russel, who is caricatured under the name of Mr. B*rr*nd R*ss*l. Mr. Russel, the well known pacifist and the most stimulating thinker in the realm of English philosophy to-day, is a great believer in Formal Logic and its intimate relation to mathematics. The book in question is a very ingenious *reductio ad absurdum* of Mr. Russel's logical beliefs. In recent times Formal Logic has had some very severe handling at the hands of philosophers, and it is perhaps as well that it should be submitted to the tender mercies of a caricaturist. Perhaps the spirit of the book will be best understood through a quotation or two, e.g., "Logical implication is often an enemy of dignity and eloquence. Dr. Morgan relates 'a tradition of a Cambridge professor, who was once asked in a mathematical discussion, 'I suppose you will admit that the whole is greater than its part?' and who answered, 'Not I, until I see what use you are going to make of it'" (p. 42). And again: "For it is a well-known fact that syllogisms can only be regarded as forming part of a sound education if the conclusions are obviously true, the use of a syllogism of the form, 'All cats are ducks and all ducks are mice, therefore all cats are mice,' would introduce grave doubts into the University of Oxford, as to whether logic could any longer be considered as a valuable mental training for what are amusingly called the 'learned professions.'" Formal Logic does stand in need of a subtle satire, and Mr. Jourdain has supplied the need in an excellent manner. It is a distinction in politics to be caricatured in the pages of *Punch*, and Mr. Bertrand Russel may take it as a compliment that his views are important enough to be caricatured in a book by itself.

A. R. W.

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Outlines of Social Philosophy. By J. S. Mackenzie, Litt.D., LL.D. London, George Allen & Unwin. Price, Ten Shillings and Sixpence Net, 1918.

This book appears at an opportune time, dealing as it does with problems of education, internationalism, a League of Nations and

other subjects, the solution of which has become more insistent with the experience gained from the Great War. Social Philosophy is a big subject, though only part of that almost hopelessly big subject of Sociology, which Herbert Spencer, with the help of the principle of Evolution, spent his life in trying to systematise. As it is, Social Philosophy, which does not itself specially discover facts, gets its inspiration from a number of subjects, such as general biology, psychology, the theory of education, ethics, politics, law, economics, history, and the philosophy of religion. All these are made use of in a general way by Social Philosophy, and it is evident that students of this subject should already have acquired a passing knowledge of its allied subjects. Otherwise—and this is a real danger in India—Social Philosophy, and still more the subject of Sociology, may encourage vagueness and superficiality. The general considerations and conclusions of Social Philosophy must, or should, be based on the sure foundation of facts, not isolated facts borrowed from many improperly-tapped sources, but taken from the fountain-head of knowledge. Social Philosophy is a delightful subject, which to the uninitiated may seem easy of acquisition—whereas, by such it is never really acquired. Its study is essentially one for the post-graduate or M.A. student who has the preliminary knowledge to enable him to form sound judgments; and equally necessary is the presence of a specially qualified teacher. We have said so much, because there is just a danger in India at present of introducing such subjects as Social Philosophy and Sociology into the undergraduate courses of our universities, where we ought not to look for that mature knowledge and judgment which are essential for the efficient study of those subjects. We are aware that Social Philosophy is a subject to which many universities outside India give special attention, and, provided it is introduced at the proper stage, it should find more recognition in Indian universities than is the case at present. Its study is an excellent preparation for intelligent citizenship, and many of its problems are such as India, with its present political aspirations, should consider and try to solve. Dr. Mackenzie is an interesting writer, and has produced what is an excellent elementary text-book on Social Philosophy. It is divided very logically into three parts. The first deals with the foundations of Social Unity; the second with National Order, and the third with World Order. A most interesting and valuable appendix discusses the leading ideas of Plato's *Republic*. The book, to some extent, takes the place of the author's *Introduction to Social Philosophy*, which is now out of print. We know no book which deals so concisely and clearly with this far-reaching subject, nor one with the conclusions of which the reader will so readily agree. On the subject of marriage, the author, while admitting that human nature is less stable than the nature of most

animals, (?) is against the tendency to relax the marriage tie, primarily, of course, in the interests of the children and mother. In the fairly good chapter on Education, the author, when discussing the curriculum of the young, says:—"I suppose it is self-evident that they should not be expected to commit themselves to any religious creed or to any form of party politics till they are mature enough to weigh the arguments on different sides." Surely a counsel of perfection! Do not the majority of us owe our politics to our fathers, our religion to our mothers? The author draws an important distinction between college and university instruction, and says, far too recklessly, that in England a university is often understood as being little more than an examining body! Another statement to which we demur is, that in Germany a university is definitely understood to mean an institution in which a particular kind of education is given, "clearly distinguishable from that given in university colleges, and even from *most* of that which is given in the Universities of Oxford and Cambridge." If he had used the word "some" instead of "most," we might not have objected. As a matter of fact, both the colleges and the universities teach much of a special kind quite equal to that which is taught in the universities of Germany. In another place the author says, that it may be said with confidence that in England education at present is in "an extremely chaotic condition"—an entirely misleading statement for those who are not well acquainted with England's educational system. "East is East, and West is West"—to a great extent. Yet "in some respects we (the West) have taken our ideals of life too slavishly from the East, with the result that there is often a sad gulf between our ideals and our practice"—which is certainly true as regards some of the tenets of Christianity, *e.g.*, "Take no thought for the morrow" is more possible of realisation in the East than in the West. The last chapter on General Results is excellent reading. It makes a forecast for society, both as regards possible dangers and reasonable hopes. The chapter is full of pregnant thoughts which will be read with interest and profit. The book, generally, is deserving of high praise, and, as far as it goes, is by far the best we have seen on the subject of Social Philosophy. We are glad the book ends with the statement that a fundamental condition for the progress of society is "the general diffusion of a thoroughly sound civic and moral education."

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Is India Civilised? Essays on Indian Culture. By Sir John Woodroffe. Ganesh & Co., Madras.

Sir John Woodroffe is a judge of the Calcutta High Court, and came to India in 1890. He is a well-known Sanskrit scholar. The essays in this book are of much interest, from whatever point of view they are regarded. They are learned as well as thoughtful, and as a

rule Sir John writes with studied moderation. The book is by way of reply to Mr. William Archer's recent book, *India and the Future*, which we have not read, but which, one gathers, even after making allowance for Sir John Woodroffe's point of view, to be a rather unworthy and ill-informed attack upon Indian civilisation.

Sir John Woodroffe's learning is revealed in his account of the religious basis of Hindu civilisation. This account has been hailed as a just one by Indian reviewers of his book. He holds firmly that it would be fatal to India to allow her own civilisation to be swamped by any other, though a certain modification of both is the inevitable result of the impact of different national cultures. This it would be difficult to gainsay. The Indian who essays Westernisation becomes not an Englishman but a denationalised Indian, and India's own civilisation is inseparable from the race. Sir John makes much of the matter of *language*. "A people who abandon their language for that of another lose themselves," he says; and again, "Only a race's own language can express its soul." And he adds, that while there is no law in India to compel anyone to learn English, there is nevertheless a sort of compulsion, since only by the learning of English do certain professional avenues become open. Here again, there is much truth; but the question is more difficult and more complicated than appears in these pages. One has to ask whether there exists, or can exist, a single national language, whether even the much-sought-for political unity of India does not depend, in great part, on the uniting influence of the English tongue, whether the riches of English literature, thus appropriated, are not of incalculable value to India. It would seem to be the best policy not to diminish, even in the slightest degree, the spread of the knowledge of English, but rather to endeavour at the same time, by resolute encouragement of Sanskrit and vernacular learning, to preserve the Indian spirit while absorbing what the West has to give.

The disparagement of Western religion and civilisation becomes a natural but unfortunate element in Sir John Woodroffe's method, and this must tell against his book in the eyes both of Indians and of Europeans. Unfortunately, also, he appears to attribute to the West the deliberate and self-defensive design of Westernising India. This is unjust, both to the Indian and British governments and to the British people. And greatest of all is the injustice to Christian missionaries, who are accused (though it is admitted there are exceptions) of purposing, by the spread of their religion, the strengthening of British power in India in political and social matters. It is not the case that Britain uses religious propaganda for political purposes in India, and no attempt at proof of the charge is made. Sir John's choice of documents with reference to Christianity and its methods is peculiar; here he does not speak either with authority or with judgment.

To the question, *Is India Civilised?* there can, of course, be but one answer : to deny this civilisation would be to put one's judgment entirely out of court. But surely the best method of attacking the question would be that, not of reasoning *a priori* from religious foundations, but that of definite study of present conditions, *interpreted* in the light of history and religion. Then the blots would appear, those striking and inhuman anomalies that excite the imagination of men like Mr. Archer—anomalies which, as the true student of the matter realises, do not impeach the foundations of Indian civilisation, but do make the most urgent demand for reform—reform in the light of the ancient principles themselves. Such an investigation would avail much more than the matter of this book.

Z.

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The Renaissance in India. The Kingdom of Youth. Both by James H. Cousins. Published by Ganesh & Co., Madras.

These books are closely related, the second consisting of "Essays towards National Education." *The Renaissance in India* contains eleven essays, dealing with such themes as are suggested by the word *Renaissance*, and referring specifically to contemporary, and past, art movements in India. Some are of much interest, those, for example, on *The Bengal Painters* have the value that comes of close study and instinctive appreciation. One on *Ruskin, the Indian Race and Indian Art*, deals faithfully with certain criticisms passed by Ruskin upon both. It is a good essay, and Ruskin deserves all that he gets. The essay on the poetry of Sarojini Naidu is excellent. There is no one better fitted than Mr. Cousins to bring out such value as belongs to her poetry, and he makes also certain just and necessary criticisms. He exaggerates her talent, but that is natural in a critic whose power lies in sympathy and not in discrimination.

The book as a whole is marred by the vagueness and the fewness of Mr. Cousins' ideas, by certain crude conceptions that always act as his touchstone, and by his rhetorical facility. In a prefatory note he remarks, "I hope that the comparative references to East and West will not be taken as an effort to deal in a balanced way with the subjects concerned. I have tried to take on an intelligent, not a blind eastern prejudice." These are naïve sentences, and in the eyes of anyone who cares about truth they do much to discount the book. Deliberately to assume a prejudice is to leave fidelity to those who prefer to be rational; and Mr. Cousins' attempt to give eyes to his prejudice is an unfortunate failure. And, indeed, the prejudice scarcely appears to be an *assumption*.

We need not follow Mr. Cousins through the labyrinth of his book. He tells us that "three immense unifying political movements provide a greater quantitative and homogeneous justification for

an entity called India than could be shown for any other entity that has achieved the status of nationality." "Quantitative and homogeneous justification"—that is the sort of phrase whose delusions fascinate this writer: it is difficult to understand how he fails to perceive their comicality. Mr. Cousins is yet a stranger in India, and he constantly insults, without intending it, the sense of humour of his Indian readers, and when he utters the delightful words, "the real India hovers over India's heads," he utters a piece of profound, though unconscious, self-criticism. All Mr. Cousins' ideas as to East and West and their relationship have an incurable tendency to *hover*: they have the utmost disdain for earth.

It need hardly be said that Mr. Cousins views with profound contempt what he calls the "materialism" of the West; but his real fear is for the concrete. And similarly, the main elements in his cherished conception of "spirituality" are vagueness and self-consciousness. The genuine spirituality that has fashioned Indian art, and, in their best phases, Indian life and civilisation, must be recognised and revered by every true student from the West; but their appreciation is, as a rule, too deep to permit of a senseless onslaught upon the ways, and the religion, of the West—the sort of attack that a cultured Indian would consider beneath his intellect.

On *The Kingdom of Youth* we need not dwell at length. It is a small book, and, indeed, as the author says, "not really a book, but a preface." Its virtues and its vices are the same as those of *The Renaissance in India*, save that there is much more vapour in it. One pleasing sentence, however, we must quote, a final comment on Mr. Cousins' work—"To the individual with a living imagination, a minimum contact with actualities is enough to set in motion the real constructive work of building an ideal." That "minimum contact" Mr. Cousins' imagination has proudly achieved. Z.

New Ways in English Literature. By James H. Cousins. Ganesh & Co., Madras.

These essays, written at various times, are collected that, in the words of the preface, they "may at least act as finger posts, showing" the "general direction" of the literary evolution of our time. The book contains some admirable essays, just and appreciative in criticism, delicate both in sympathy and in touch. No more intimate interpreter of the Irish movement could be desired than Mr. Cousins, who had no mean share in it, and there are three essays relating to its outstanding figures. There is a thoroughly sound "defence" of the late poet-laureate, Alfred Austin; and another very suggestive essay is that upon "Some Characteristics of George Meredith's Poetry."

Mr. Cousins is at his best when educating the virtues of particular types of poetry.

He has, however, an unfortunate tendency, not so evident in this book as in *The Kingdom of Youth* and *The Renaissance in India*—that of shrouding, in a haze of abstract words, chosen for their own sake, an idea not so very concrete even when unshrouded. Sometimes it is the nebulousity of the idea itself that is responsible for expression such as this—

Tagore's poetry "seemed to move at an altitude far above all derivation, and with a sense of finding in the history of religion, philosophy and literature a gratifying but hardly essential, corroboration, not a source or a justification. This was not, of course, felt as a pose or a conscious quality, but rather as the concomitant of spiritual authenticity that is at home in all lands, and new in all ages." This sort of thing reminds one of the somewhat gifted schoolboy, who tries to delude his master by heightening his style when ideas begin to fail him. Mr. Cousins would profit greatly by a little severe mental discipline; but one imagines that the word discipline does not exist in his vocabulary at all.

The first essay, dealing in general with "New Ways in English Literature," is full of interest, whether one agrees with it or not. Mr. Cousins replies excellently to the assertion that the prevalent irregularity of rhythm, and loose adherence to rhyme, in poetry, is justified by the complexity of the time. "Others, he says, will be forgiven if they wonder if the modern atavism in technique—the alleged bid for freedom—is not, at worst, a symptom of emotional haste and intellectual laziness, or, at best, a renunciation of art's duty to be artistic." There are few contemporary poets that do not require this warning. Mr. Cousins is rather unfortunate in his opening pages. He declares that "the war has produced no poetry." We have before us, as we write, the volumes of several poets, whose prime stimulus to utterance, whose great enlightener, has been the war, with its awakening. Of these Rupert Brooke stands incomparably the highest. By far his greatest work is directly due to the war's inspiration; and it is work unmatched in the Western literature of our time. To Mr. Cousins the "prophetic impulse" of Rupert Brooke is, by some strange logical process, "discounted" by the work of Henry Bryan Binns! The trouble is that Mr. Cousins does not faintly understand either the war or Christianity, which he is never tired of asserting to be responsible for it. Probably he would have understood Christianity better had he found it on some Eastern journey, and had its embracing implied the ecstasy of some sort of revolt. As for the war, *that* may be understood either by the intelligent and candid study of history, or through the revealing power of personal sacrifice. And it will be found that Western literature of our time

owes to the rousing and chastening influence of this war a debt very many times greater than is due to that impact of Eastern thought upon which Mr. Cousins is so fond of dwelling. Western thought, Western poetry, thinks Mr. Cousins, are to be recreated by the power whose dwelling is the East. The assertion finds an interpretive parallel in another assertion (much more succulent) in this book—"The Muse of Ireland taught rhyme to Europe!" Z.

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The Garland of Life. By James H. Cousins. Messrs. Ganesh & Co., Madras.

Mr. Cousins' poetry is a very different matter from his prose; and it would be difficult to praise too highly the poetry of this book. He writes in many metres, and in many moods, but his mastery is almost unfailing, and certainly in every poem there is inspiration and the authentic word. The most elaborate poem, "A Hymn to the Song Goddess," is perhaps less successful than the simpler pieces; and the Eastern pieces less spontaneous than the Western. The finest of all is the "Dedication to Francis Sheehy-Skeffington," a really magnificent piece of work, raised by its beauty and its strength to a very high level of poetry. The poems of the East include a number of "paraphrases" from various Indian poets, of various languages and times. These have a special interest and much beauty; and one imagines that Mr. Cousins has been entirely successful in his avowed attempt "to reproduce the *spirit* of the originals."

The first part of the book is richer in the fruits of Mr. Cousins' own genius. There are grave and dignified passages, but usually the touch is light and delicate, and fair image, perfect phrase, and unforgettable rhythm are more characteristic of his work than is profundity of thought. In those matters of the spirit of which, in certain poems, he writes, the poet's feeling has taught him well. Each page is richly jewelled.

"And know, clasped hands and clinging kiss,
Not Love, but Love's pale ritual,"

"And holy things are bent to build
A locked and darkened house of stone,"

"And though the Why and Whence be dark,
And questions Whitherward avail
No jot, I feel behind my bark
A homing wind is in the sail."

The young-eyed soul's affirmative—this is speech that in any generation would lend distinction to a poet. One of the most characteristic poems is "A One-sided Conversation with a Field-Mouse," a delicate and exquisite, yet whimsically humorous, presentation of a great and moving idea.

Mr. Cousins' ear is not impeccable, though its sins are few. The play in

“ Who stand because they understand ”

is rather afflicting; there is bathos in

“ I am spread
As one dead, ”

and at the end of the poem “ Flight ” Mr. Cousins produces, by assonance, an effect quite different from that obviously intended, nay, horrible beyond endurance :

“ When we leave control with the Soul,
Wisdom's goal ”

A single poem, “ To the Still-born Child of a Friend, ” well illustrates both virtue and delinquency :

“ Little barque that never knew
Sea-made music round your prow ;
Morn that died before its dew ;
Ageless thing untimed by Now ;
Wind that never stirred to breath ;
Door shut fast on rumours rife ;
You, who have not tasted life,
Cannot know the sweet of death !

Ah ! pale poet, on your tongue
Silence is the loudest word,
Ageing not, since never young ;
Chanting like a hidden bird :
Peace comes deeper from your strife ;
(Thus to us the Silence saith)
Not till you have tasted death
Can you know the sweet of life. ”

The opening lines are beautiful beyond all praise. The fourth line jars because it is not poetry. The “ door ” figure in the sixth is acutely unpleasing, besides being incongruous. The seventh and eighth lines are good, but are quite out of consonance with the temper of the opening lines, and should not follow them. The second stanza again begins exquisitely, but the third line mars all with a curiously futile and most unpoetical conceit, and the paradox, depending upon the contrast between the endings of the first and second stanzas, is little more than verbal. Thus Mr. Cousins is not unerring, whether in word or in figure, but this scarcely detracts from the inestimable value of his book. Z.

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The Silken Tassel. By Ardeshtir F. Khabardar. Theosophical Publishing House, Madras.

The poems in this book are the work of a man who has an inborn sense of music ; and he has a gift for English versifying which is remarkable in one whose native tongue is of a very different

genus. His rhythm is nearly always true, the cadence is unerring, and the regular music of his lines betokens him a master of his craft.

There are poets who sing because they must and whose whole intent is sweetness of sound; and there are others whose thoughts are so high, and fraught with such divinity, that their natural expression is poetry. To the former, their facility as to form is their greatest danger, and one is inclined to think that Mr. Khabardar's perils lie in this direction. He has at his command, in an exceptional manner, the machinery of poetry—wealth of image, aptness of word, and ease of composition, and he is without question endowed with the poet's spirit; but one feels that his tendency is towards overprofusion, and the want of clearness that must follow this prodigality. One would like to use his own beautiful words to the kokil as a form of indictment against himself:

“Thy fresher skies, thy soft love-scented air,
Thy mountain-heaps of flowers,
Thy greener woods and pleasure-shades between,
Thy sunny dome of light and azure rare,
And thy sweet music-haunted magic bowers.”

For beauties of this kind form almost too large an element in his poetry, and one feels the cloying of overmuch sweetness, and longs for an infusion of severity, for the defining touch of life. Then, his readiness of image sometimes makes him a little reckless:

“God within them budding like a rose”

and

“Man will be the perfect sum of spirit and the clashing clay,”

—these examples are typical of many figures that jar upon the imagination. Error of this kind is of much greater importance than mere error of expression, due to inadequate acquaintance with the language, as in

“He spoke to her *with feelings smart*”

and

“How can the sharp-edged shadows *cut and run*
The light from heart and eyes?”

It is natural that poetry written in a language not native to the poet should be largely imitative; and certainly in Mr. Khabardar's work there are many echoes of the English poets. Keats, Shelley, and Tennyson can be heard, distinctly or faintly, in many of the poems in *The Silken Tassel*. This, of course, in no way lessens the charm of his work, for, as we have said, his gift is music, and music itself is but a reproduction of sweet sounds, heard and unheard. X.

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Victor Hugo. W. H. Hudson. Poetry and Life Series.

The addition of the great French poet to this series is very opportune; for in these latter days we have shared so closely in France's hopes and fears that it is fitting that we (and especially our student

youth, for whom primarily these volumes are written) should learn to know the man who, wittingly or unwittingly, was once her unequivocal voice.

Victor Hugo had inherited the traditions of his country's sufferings and of her glory, and he was quick to resent anything that touched on her honour :

“ Prenez garde!—La France, où grandit un autre âge,
N'est pas si morte encor qu'elle souffre un outrage ! ”

and eventually his outspokenness against a tyranny that had betrayed her drove him into exile. He was among the pioneers of the Romantic movement that freed literature from the shackles of Classicism, insisting on the democracy of words and the need of them all to express “ Mon âme aux mille voix.”

“ French of the French ” was Hugo ; one moment overcome with life's melancholy — “ Helas ! naitre pour vivre en desirant la mort ! ” — the next, filled with irrepressible buoyancy and joy in nature, —

“ La plaine brille, heureuse et pure ;
Le bois jase ; L'herbe fleurit.
—Homme ! ne crains rien ! la nature
Sait le grand secret, et sourit.”

He was a man of deep affections, witness his life-long mourning (often articulate in verse) for his dead daughter ; and full of a tenderness for all things weak, that perhaps was the source of his power of unaffected pathos.

Mr. Hudson's little book is an unobtrusive guide (in the admirable manner of this series) to the study of his work ; and perhaps it may be allowed a chance reader to repeat the oft-told and increasingly true tale, that a great poet is a world-possession, be he the greatest of nationalists, and no matter how inspired his songs for country, his best work—as it is with this “ Child-lover ” and “ Lord of human tears ” —must always be that which treats of the simple things of a common humanity.

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Intermediate Poetical Selections. Edited by Keshavlal L. Oza, M.A.
Bahauddin College, Junagad.

This book contains a number of the poems of certain of the greatest English poets, and its author's endeavour is to use these to provide a real introduction to literature. By means not merely of full annotation but of essays biographical and interpretive, he seeks to lead the Indian student to a proper point of view, both for the understanding and for the criticism of various types of poetry. The work is remarkably well done ; and the book is of quite exceptional value to any student, whether or not the poems prescribed for his own university or school study coincide in any degree with those dealt with by Mr. Oza.

Kanarese Literature. By E. P. Rice. The Heritage of India Series, Calcutta.

We have great pleasure in welcoming Mr. Rice's book as an attempt to give the Kannada people a real history of their literature as distinguished from mere catalogue and chronology. It is, of course, based on the labours of Dr. Kittel, Mr. Lewis Rice and Mr. R. Narasimhachar, and other scholars in the field of Kannada language and literature, as well as South Indian antiquities generally. "Without their researches this book could not have been written"—(preface). But it is no mere compendium that we have before us: the writer has avoided the easy method of enumerating "a long series of little known writers" (preface), and taken the study a step forward by treating the literature as a product of the Kannada people, in relation to their religious, political and cultural history. He groups the writers effectively—even including the Sanskrit writers who lived in the Kannada country—and relates them to their environment and background: the centres of influence where the standard works were written, the kings that patronised, the legends and beliefs, and the successive developments in religion—the Jaina, the Lingayat and the Vaishnava—and the modern impact of Western culture and religion. The purely linguistic side has not been ignored. There is just enough reference to the Dravidian family of languages, the periods and dialects of Kannada, the alphabet, the inscriptions, and a few remarks by the way on prosody and literary forms. A map of the Kannada country and an old inscription have been added. More important than these, at the end an attempt is made to estimate the literary value of the whole body of writings, its merits are sifted from its defects, and suggestions offered on the right use and influence of the new culture of the West in developing a new literature in Kannada. On the whole, it is refreshing to find the material handled on right lines, with the result that an excellent first book has been produced on the subject.

Good as we find the book to be, we should like to offer a few suggestions for the next edition. Practically all the main facts on the subject so far established by research have been gathered into the book, but we miss the note of authoritative and independent scholarship. There is no real criticism, worth the name, of individual writers of the first rank. Where the material was full in the authorities used, the present book is full: as in the Ancient Period, and to some extent the Mediæval. But full justice is not done, it seems to us, to the Modern Period. Books that are no books, the mere atmosphere in which literature develops, are set down as literary works, *e.g.*, educational and departmental publications, commentaries, periodicals (pp. 72-73). The second volume of Mr. Narasimhachar's *Kavi Charite* is not yet published, we know, but even with the knowledge at present available the treatment could have been made fuller and more substantial.

youth, for whom primarily these volumes are written) should learn to know the man who, wittingly or unwittingly, was once her unequivocal voice.

Victor Hugo had inherited the traditions of his country's sufferings and of her glory, and he was quick to resent anything that touched on her honour :

“ Prenez garde!—La France, où grandit un autre âge,
N'est pas si morte encor qu'elle souffre un outrage ! ”

and eventually his outspokenness against a tyranny that had betrayed her drove him into exile. He was among the pioneers of the Romantic movement that freed literature from the shackles of Classicism, insisting on the democracy of words and the need of them all to express “ Mon âme aux mille voix.”

“ French of the French ” was Hugo ; one moment overcome with life's melancholy —“ Helas ! naitre pour vivre en desirant la mort ! ” — the next, filled with irrepressible buoyancy and joy in nature, —

“ La plaine brille, heureuse et pure ;
Le bois jase ; L'herbe fleurit.
—Homme ! ne crains rien ! la nature
Sait le grand secret, et sourit.”

He was a man of deep affections, witness his life-long mourning (often articulate in verse) for his dead daughter ; and full of a tenderness for all things weak, that perhaps was the source of his power of unaffected pathos.

Mr. Hudson's little book is an unobtrusive guide (in the admirable manner of this series) to the study of his work ; and perhaps it may be allowed a chance reader to repeat the oft-told and increasingly true tale, that a great poet is a world-possession, be he the greatest of nationalists, and no matter how inspired his songs for country, his best work—as it is with this “ Child-lover ” and “ Lord of human tears ” —must always be that which treats of the simple things of a common humanity.

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The problems of language and prosody, again, are handled in a hesitating and misleading manner. "Dr. Kittel notes four stages in the history of the language during the past thousand years—*viz.*, Ancient, Mediæval, Transitional and Modern" (p. 10). And we are referred to his *Dictionary*, where we have a division into three periods. The fact is, Mr. Lewis Rice, on the strength of a few early inscriptions, suggests a Primitive Ancient Kannada Period (*Pūrvada Hala Gannada*). And we seem to have in the view quoted above a desire to accommodate both writers. Only three periods are generally accepted, and if there is to be a revision we should personally desire to reduce the periods to two, rather than extend them to four, treating the Mediæval as a transitional or mixed stage which has few distinguishing characteristics to be ranked as a separate period. On the same page, the statement that "Ancient Kanarese does not always denote an obsolete form of the language" is ambiguous and misleading. Ancient Kannada as a spoken language is obsolete; it may, of course, still be written by learned authors, who might use archaic forms or the whole archaic idiom. The history of prosody again hardly gets the attention it deserves. A remark or two is made, incidentally and at secondhand. On p. 13, the Shatpadi is characterised as "monotonous"—in contrast, we suppose, to the Sanskrit metres of the Champus. We should have expected an English writer to appreciate a genuine native metre, evolved by the genius of the language, gradually displacing the foreign metres, and handled by the great masters of modern Kannada with a music and a varied harmony that has enchanted the hearts of all Kannada people. The origin and development of this freer metrical rhythm should have aroused the curiosity of a scholar, but we only get the traditional story that it was "invented" by Raghavanka (pp. 43, 83). And the fact that the *Sabdamanidarpana* (1260) does not refer to the Shatpadi is used to solve the question whether the Lingayat writings began about 1160 (according to Mr. Narashimhachar) or about 1260 (according to Mr. Lewis Rice), by no means a safe method of proof.

A few errors of detail may now be noticed. On p. 52 *Jiva Sambodhana* is said to be "addressed to a certain Jivana"—an obscure individual, apparently; it is addressed to the *Jiva*, or the Soul. On p. 73 *Panchali Parinaya* a play is referred to as *Panchala Parinaya* in novel form. On p. 29 a misunderstanding in the text of *Kavicharite*, Part I, which has been cleared up in the Appendix, is repeated: that Nagavarma is thought by some to be a younger brother of Chamunda Raya. On p. 62 *Rajasekhara Vilasa* is described as "a specimen of fiction in verse," which gives a wrong impression. It is certainly not a fiction like *Lilavati*, which the writer calls "the earliest specimen of the novel or genuine work of fiction" in Kannada verse. It is, on the other hand, an elaboration of the subject

matter of *Bhava Chinta Ratna*, which is "the Saiva legend of the pious king Satyendra Chola" (p. 49). On p. 62 the date of Lakshmiśa is left uncertain, without any reference to the upper limit offered by Lakshmiśa's imitation of quite a number of verses from *Virupaksha* (1585). Finally, there is the phrase on p. 26—"the earliest author of which we have information"—a bad slip.

One other point we feel bound to notice in fairness to the people of this country. A Christian writer, dealing with a literature that is essentially religious and legendary, naturally judges from his own standpoint, and we heartily welcome all criticism that is fair and makes us see ourselves as others see us. Such a judicial and fair attitude has on the whole been maintained by the writer, but we cannot help wishing that the following charitable sentiment, on p. 57, had been suppressed:—"In South India . . . it was Krishna and his mistress, Rādhā, that gained by far the widest devotion. This is matter for regret, as the sensual imagery used by the votaries of Krishna has degraded religious conceptions, and introduced into the homes and minds of the people a most pernicious element from which the worship of Rama is free."

We love Kannada, and should like to see Mr. Rice's book acceptable to every one who has the interests of our language at heart. We congratulate him on the excellent addition he has made to the few books we possess on the subject, and unhesitatingly recommend it to the general reading public, and specially to the undergraduates of our University.

B. M. S.

The Samkhya System. By A. Berriedale Keith, D.C.L., D.Litt.
Calcutta: Association Press.

This is a book belonging to the newly-planned "Heritage of India Series," and its author is one that is well known in the world of letters by his many-sided work. It is written in a simple and straightforward style, and its contents, as may be expected, indicate great depth of scholarship. But it is doubtful whether the book is well adapted to secure the particular aim which the editors of the series have in view, *viz.*, "bringing the treasures of India's past within the reach of the general reader"; for the treatment of the subject is somewhat technical. The book is besides packed with information; but that was perhaps unavoidable, when a vast subject had to be compressed within the narrow limits prescribed for this series. The sub-title restricts the scope of the book to a consideration of the history of the Samkhya system; and, judged as such, it leaves practically nothing to be desired. The author passes in review, in the small compass of about a hundred pages, all the stages in the development of the

Samkhya doctrine. No phase in its long history is neglected; and no view of any noteworthy scholar is ignored. The arguments with which the author meets views counter to his own are astute; and, if they are somewhat condensed in form, they are clear and unmis- takable. The student of Indian Philosophy cannot feel too grateful if similar manuals are forthcoming for the other systems also.

Although philosophic speculation began very early in India, we must look for the real starting-point of Indian philosophy in the Upanishads. Even in the Upanishads, it is true, no system is to be found in a completely articulated form; yet they pave the way, as has been said, for India's enduring philosophy. As against the view that the Samkhya was already extant as a system in the Upanishadic period and influenced Upanishadic thought, Dr. Keith maintains that it was not even in process of formation then, and is decidedly of later growth. The arguments advanced in support of this view are quite convincing. The quest of unity is the manifest object of the Upanishads. This quest really began earlier; for it is traceable in the Brahmanas—even in the Mantras; and it shows how deeply the ancient Hindu mind was convinced of the unity of Truth that, though one monistic solution after another was tried and given up in the course of a long period, the search itself was never abandoned until a satisfying conclusion was reached in the doctrine of *Atman*. The Samkhya rejects the monistic conclusion; and to regard the Upanishads as borrowing from such a system, or as being influenced by it, is to misrepresent the entire tenor of the speculative literature of the Vedic period. The Samkhya is dualistic, and teaches that neither mind can account for matter; nor matter for mind. It takes its stand on reason, and unhesitatingly discards traditional religion. As a result of its intellectual analysis it arrives at two ultimates—*Purusha* and *Prakṛti*, spirit and nature. Spirit is the very reverse of nature. The former is conscious but is totally devoid of activity; the latter is active but wholly unconscious. The extreme dualism of the Samkhya is to be explained as the result of a conscious reaction against the monism of the Upanishads; and in elaborating its dualistic position the Samkhya freely drew upon the philosophic material available in the Upanishads. It is this circumstance that accounts for the common features of the Samkhya and the Vedānta; and it is to this circumstance that the illogical position of the Samkhya, at least in one respect, is to be attributed. According to the Samkhya, spirit and nature have together but one purpose to fulfil, viz., *bhoga* (worldly experience) or *apavarga* (final release). But spirit and nature are entirely disparate, and it therefore becomes wholly unintelligible how there can be mediation or interaction between them. The famous simile of the blind man carrying the lame man on his back breaks down; for the two men are endowed with activity, and can therefore co-operate.

Here spirit cannot act ; nor can nature, being all unconscious, receive directions from spirit. In other words, the Samkhya recognises the empiric self, but has no explanation whatever to give of it.

After pointing out the derivative nature of the Samkhya, Dr. Keith proceeds to consider its relation with Buddhism on the one hand, and epic philosophy on the other. It is a pity that he should deal with the former first, for that gives rise to an impression that the epics are later than Buddhism. Dr. Keith assigns 200 B.C.—200 A.D. as the limits of the epic period, and it is possible that he means that the philosophic portions of the epics are later than Buddha. But that is hardly a proved fact, in spite of our author's condemnation of the opposite view, held by Dahlmann, as "unhistorical." Speaking of Buddhism and Samkhya, Dr. Keith states that neither is derived from the other ; but that both go back to the Upanishads. Only Buddhism represents a further disintegration of Upanishadic philosophy than the Samkhya. In this connection is discussed fully Prof. Jacobi's view, according to which Buddhism is based upon the Samkhya. There are, no doubt, some similarities between the two, such as the rejection by both of the Upanishadic Absolute. But the differences are equally striking, *e.g.*, the absence of all reference in Buddhism to the Samkhya doctrine of the *gunas*. The utmost that can be stated, under the circumstances, is that both the classical Samkhya and Buddhism are derived from an earlier phase of the Samkhya, which, we must suppose, had not developed the doctrine of *gunas*. For such a supposition, however, there is no adequate evidence. In the epic period, with its limits fixed as above, the Samkhya was still in the making, which accounts for the many variations of the epic Samkhya from the classical Samkhya. It was thus after 200 A.D. that the Samkhya took its present shape—a period in which, in all probability, the other classical systems also were evolved.

After a brief and inconclusive reference to the connection between Greek philosophy and the Samkhya, the author discusses the date of the chief classic of the system, *viz.*, *Kārikā*, whose comparative antiquity has been established by the discovery of a Chinese translation of it dated 550 A.D. (*circa*). The author of the *Kārikā* was Iśvarakṛishna, who probably flourished in the Gupta period—the golden age of Classical Sanskrit literature, in which great poets also like Kālidāsa lived. This historical sketch is followed by a summary of the teaching contained in the two or three chief works of the system ; and the book closes with a reference to the syncretism of Indian Philosophy in its last phases, which tended to reconcile the differences between one system and another.

M. H.

Instruction in Indian Secondary Schools. Edited by A. H. MacKenzie, M.A., B.Sc., A.R.C.Sc. Humphrey Milford, Oxford University Press, Bombay, 1918. Price Five Rupees, Eight Annas.

This is a book on school management and methods of teaching, by different writers "specially qualified by knowledge and experience to deal with their respective topics." The writers have written independently of each other, though they have "all written with special reference to conditions prevailing in India, and have collaborated to discuss the chief practical problems which daily confront the teacher—discipline, school and class management, skill and method in teaching." A necessary word of warning is given that, after all, "the true secret of vitalizing is not in methods or devices; it lies in the teacher's belief in the value of his work, and in his liking for young people."

Anyone interested in education, and who knows the special and widespread defects of teaching in this country, must welcome this book. Books written on school method and management by men of Indian experience are few and far between. Is that because teachers and those directly concerned in teaching are conscious of their inability to write, or because those who are able to write are not sufficiently interested to do so? One book we remember, which had great vogue thirty years ago, was Fowler's *School Discipline*, written by a Madras educationist. That is naturally out of date, and since it was written there has been a lamentable dearth of books specially adapted for Indian teachers. On the other hand, there has been a flood of educational literature from the press, both in England and America, available for the teachers of this country. It will be said that school management and methods are the same the world over. But India is an educational world of its own: with its own conditions and intellectual atmosphere, in which the average boy is keen to learn but learns so little, in which the principles which should rule school and class management are very different from those which prevail in England, in which the defects in teaching are pronounced and universal, and in which the method of teaching in some important cases is, or should be, a method born of the peculiar conditions of the country. Where else, for instance, are millions of children being taught through the medium of a foreign tongue? The teaching of English, like the teaching of Latin and Greek in secondary schools in England, absorbs most of the time-table. But whereas English boys are taught through the medium of their mother tongue, Indian boys in secondary schools are taught through the medium of a language which physiologically, constructionally and intellectually is as far removed from the genius of their own language as the north pole is from the south. It stands to reason then, that text-books on the

teaching of English in England are no true guide to the teaching of that all-important subject in India. For this reason the devotion of two chapters to the teaching of English in the book before us is fully justified. The two writers, Mr. J. A. Yates and Mr. L. Tipping, are both keenly interested in their subject, and are therefore both worth reading. They are both doughty champions of the direct method, to whom the method of translation, on which so many fine English scholars in India were nourished, is anathema! But they part company on the use of phonetic symbol in the early stages. Mr. Yates is a convert—or shall we say “pervert”—to Phonetics, and he would have the phonetic symbols taught from the first, symbols barbarous in form and most horrifying to the reader. Poor little pupils! And “the subsequent transition to the orthodox spelling is found to present no insuperable difficulties!” Mr. Tipping, who is very properly insistent on the importance of the subject of pronunciation, does not favour the use of phonetic symbols, “as the multiplication of forms, unless in very skilful hands, more often tends to confusion than to enlightenment.” It is to be regretted that in a book intended as a guide to teachers two such diametrically opposite views should have been allowed to appear and to harass the teacher. Moreover, the writers do not seem to have agreed to write according to exclusive plans, and the result is not a little overlapping. It would have been better if the subject of English had been entrusted to one writer—free, of course, from idiosyncrasies. This reminds us that if Mr. Yates has a weakness for phonetic symbols, Mr. Tipping has, what seems to us, curious ideas on the phonetic equivalent of certain vowels and consonants. In his justifiable anxiety that letters should be given their full sounds, he gives the following illustration: “Words like *pane* and *fine*, if pronounced very deliberately, will resolve themselves into *pay-eeen*, *fah-eeen*. But is *fah* the true phonetic equivalent for “f,” and *eeen* for “ine,” and are not such examples likely to be more misleading than helpful?

The chapter on the Teaching of History, by Mr. John L. Watson, is very readable. Perhaps too much space is given to justifying the place of history in the school curriculum, but what is said is both interesting and instructive. Mr. Watson would exclude English constitutional history—its political history is of no value to the Indian student—from the school curriculum. But we think some knowledge of English History is desirable for Indian boys who do not pass beyond the Matriculation stage, and in this view we have the support of a good many Indians. Mr. Watson's insistence on making history real and vivid in the early stages by making it largely biographical is good, and the recent issue of excellent text-books on these lines (reviewed in this Magazine) shows there is ample material for the purpose. The chapter on the Teaching of Geography, by Mr.

Tydeman, may be strongly recommended, but we wish that he had spent more time in pointing out the more radical defects in the teaching of one of the very worst-taught subjects in India. He is naturally anxious to devote his chapter "to a discussion of what should be, than rather what should not be, but for all that, attention should be drawn to the method, or no-method, employed in teaching this important and interesting subject. Mr. Tydeman has embodied the results of recent inquiry and research in clear instructions to the teacher, and if his directions are generally carried out a marked improvement in the teaching of geography is sure to follow. The remaining chapters deal with mathematics, nature-study, physics and chemistry, drawing, and educational handwork. They are all up to date, and, what is of the first importance, they are written with a view to the special condition of Indian pupils. We particularly commend the chapter on School Management, though in both that and the chapter on Class Teaching there is much which the good teacher knows by instinct. The late Mr. J. Nelson Fraser, who was responsible for "Class Teaching," had an arresting and interesting way of writing, and much which he says here is marked by common sense and practical import. The book is bound to find its way into all the training colleges and normal schools in India. It would do that, we suppose, in any case. But in this case the fact that the book is written specially for Indian teachers, by capable, experienced and enthusiastic writers will ensure its success from a business point of view. We wish we could be equally confident that the principles and reforms which it advocates will be put into practice!

France; The Nation and its Development from Earliest Times to the Establishment of the Third Republic. By William Henry Hudson. London, George Harrap & Company. Price Ten Shillings and Sixpence Net.

It is sad to think that, since writing this review, the news has come of the author's death. Mr. Hudson was a versatile writer, but he is probably better known, certainly in India, as a writer of English Literature than as an historian. It goes without saying that he writes well and interestingly. Considering that he compresses his account of France from the earliest to the latest times within the narrow compass of six hundred pages, he has succeeded in giving an interesting and adequate outline of the history of France. The story flows on evenly and continuously, and there is not a single dull page to discourage the reader. The history of France is as fascinating in its way as is that of England, and just at present, when France is looming large, the book before us should prove especially attractive. To English students the history of France is generally acquired through

manuals of general European history. But the history of that country deserves separate and complete treatment, and there are comparatively few books available to the English reader which are exclusively devoted to the subject of French history. Among such we would give a prominent place to Mr. Hudson's work, which may be recommended equally to the student and the general reader.

Mr. Hudson says that the *entente* countries have been fighting to-day for the principles of democratic government, the same principles which France was the first among European nations to proclaim in unmistakable terms to the world one hundred odd years ago. In the light of the democratic changes which the Great War has effected, and which are still pending, "the history of France—the standard bearer of liberty among the peoples—is fraught with fresh meaning for those of us who believe the triumph of democracy is the only guarantee of the future of civilization." Some will probably demur to what they will consider as a too-generous acknowledgment of the part played by France as the champion of Liberty. It is true, as Mr. Hudson says, quoting Professor Pollard, that a hundred years ago the Tories in England were sitting "upon the safety-valve of constitutional reform." But they did not continue so to sit for long, and the last hundred years has seen in England the gradual and almost perfect development of democratic government. The Englishman throughout has been guided by fixity of purpose, cool firmness and a comprehension of the object in view—consciousness of liberty and of right. What period in French history can compare with that of the seventeenth century in England, what hero with John Hampden? This love of liberty was a guiding principle for centuries with Englishman, and it scarcely seems consistent with facts to make France the leading champion in Europe of Liberty and democratic government, because, as the creature of impulse and filled with righteous passion, she cried "Liberty" with a trumpet-call at one moment in her career. But we have no wish to cavil at Mr. Hudson's generous appreciation of so heroic an ally as France. After all, his attitude is that of many Englishmen, who see in others virtues which they do not recognise in themselves.

The book has been most artistically produced—in a way we have come to expect from the firm of Harrap & Company. There is a beautiful photogravure frontispiece of Jeanne d' Arc, and forty-eight full-page plates in halftone of celebrated persons and places in French history. The list of illustrations is accompanied by excellent letter-press, giving just the information of interest which is wanted—a very creditable feature. The maps are artistically produced, and conveniently arranged for reference while reading. A list of important dates is given, and the book closes with a very full and useful index. Nothing has been omitted to give an added interest and value to the

text. Up to the close of the career of Napoleon the Great the treatment of the history is adequate, considering the size and purpose of the book. Some thirty pages are devoted to the remaining history of France down to the overthrow of Napoleon III, and the treatment seems to us scarcely sufficient. Each chapter is broken up under appropriate headings, and at the close of each reign there is a well-balanced and interesting sketch of the character of the monarch. These summaries are well written and attractive, and the judgments they pass may generally be taken as correct.

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Ancient Indian Education. By the Rev. F. E. Keay, M.A. Humphrey Milford, Oxford University Press, Bombay, 1918. Price Four Shillings and Sixpence net.

This is an inquiry into the origin, development and ideals of ancient Indian education. The book was originally a thesis for the degree of M.A. in the University of London, and is published with the permission of the Senate of that University, a fact which guarantees the high literary and scholarly standard of the work. The book is sure to appeal to the increasing number of educated Indians who are patriotically interested in the foundations of Indian civilisation at a time when, like the present, India is passing, in the words of the author, "through a period of intellectual, social, political, and religious ferment, which is in many ways similar to the change through which Europe passed during the Renaissance." The appearance, then, of a book dealing in a scholarly way on education in ancient India at such a time is most opportune, and its effect will be to strengthen the conviction of those who believe that education has been sacrificed to Western methods and ideals. The author believes that the development of India's future educational ideals will not be governed solely by Western educational thought and practice. What he hopes is "that there will arise . . . a system which, while incorporating new and old, will transcend both in its practice as well as in its ideals"—as to which there are not a few who hold that such a happy blending is undesirable, if not impossible. The fact that Brahmanic education persisted through so many centuries, survivals of which are found even to-day, is proof that it answered a practical purpose in spite of the philosophical and spiritual element which permeated it to such a large extent. Although the spiritual basis was paramount, there was enough of utilitarianism in the educational system to save the Hindus from becoming "a race of impractical dreamers who spent much of their time in meditating on lofty abstractions." The caste system by determining a boy's career from his birth effected a vast system of vocational training, which largely counteracted the tendency to abstraction in education. Among the

characteristics of ancient Indian educational ideals to which the writer draws attention was that of the intimate, paternal relation between pupil and teacher. The absence of this characteristic in the modern system is a defect which is deplored by educational reformers, and hostels and tutorial systems are but poor substitutes for the real domesticity which characterised the ancient system. The employment of monitors as teachers was a development of this relation, for the monitors were as "the elder brothers of the family." Another characteristic of Brahmanic education was that the ideal locality for teaching was the forest, with its suggestions of beauty, simplicity, and spirituality—a characteristic which Sir Rabindranath Tagore is reviving in his open-air school in Bengal. Mr. Keay's book is a scholarly, interesting and important work, based largely on original research. It comprises chapters on Brahmanic education, the education of some special classes, Buddhist education, Muhammadan education, popular elementary education, and some general conclusions. Its range, therefore, is wide, and its interest is such that very few readers who read to the end will close the book with a sense of relief from boredom.

The Future of Public School Education. By D. B. Somervell, M.A., Fellow of All Souls College, Oxford. Humphrey Milford, Oxford University Press, 1918. One Shilling and Sixpence Net.

Most of us, we imagine, have in after life had reason to regret the time wasted on our education by being forced to learn subjects which had no practical bearing on the affairs of life, or which were taught by wrong methods. This is bad enough, but it is pathetic when boys under actual instruction are painfully conscious of the fruitlessness and distastefulness of much which they are taught. This is particularly the case with the subjects of Latin and Greek, a working knowledge of which only a very small fraction of boys acquire. The pamphlet or small book which Mr. Somervell has written is a vigorous attack on the compulsory learning of those subjects. The author received his education at a public school, and is "greatly impressed by the amount of time wasted by himself and others, not only from the nature of the subjects taught, but also from intellectual laziness largely induced thereby." No apology is needed for adding to the already overwhelming literature on education, especially that on the public school curriculum. For the time is ripe for a determined onslaught on public school education, and the great war has shown the necessity for a revolutionary change. But the citadel of the present system of secondary education will need vigorous storming before it capitulates. It is significant that the author is a Fellow of an Oxford college, and that his book is published by the Oxford Press; for

Oxford is the stronghold of the system which compels all those who desire to enter its portals to show a pretence of a knowledge of Latin and Greek. If cogent reasoning had its way, Mr. Somervell's little book ought to go far to undermining the mediæval and conservative system which dominates the older universities and their feeders, the secondary schools.

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Manual Training for Indian Schools. By J. Y. Buchanan. Humphrey Milford, Oxford University Press, Bombay, 1918. Price Three Rupees, Eight Annas.

This is really what it claims to be—a practical handbook for teachers. Mr. Buchanan is Inspector of Drawing and Educational Handwork in Panjab, and what strikes one most is the essentially practical character of his book, with its clear instructions and illustrations. The Hon. Mr. J. A. Richey, Director of Public Instruction, Panjab, writes a very apposite Introductory Note, in which he recommends a course of manual training as an antidote for the too exclusively literary course which obtains in the educational system of India. For city schools the creation of centres is recommended as the best way of introducing manual training. These centres will serve the purpose of three or four schools, and the necessary expenditure for training three hundred boys is very modest. The tools and equipment cost Rs. 2,250, and the annual expenditure on salaries and current expenses amounts to about Rs. 3,250—a comparatively small outlay for such an end. The author fully allows for the subordinate place which manual training must take in the school time-table, but he is of opinion that special primary and middle industrial schools might be established, in which the vocational element would predominate. "In such schools the training should centre round one or two trades and the subjects closely allied to them, *viz.*, drawing, practical arithmetic, the study of materials, trade terms and methods; the general literary work being reduced to the minimum necessary for an intelligent workman." The idea is commendable and worthy of consideration. Half the book consists of illustrative plates of interesting objects for actual construction by the pupils. We hope the book may be the means of attracting attention to this important subject, in which it is an excellent guide.

Pride and Prejudice. By Jane Austen. English Literature for Secondary School Series. Edited and abridged by H. A. Treble, M.A., 1917. Price One Shilling. Macmillan & Co.

The notes in this little book occupy only a single page! but they are ample for ordinary English pupils, though a few more

might, perhaps, be necessary for Indian scholars. There is an excellent Introduction, subjects for essays, questions, and helps to further study. These are all good, and calculated to assist composition and to create and develop literary appreciation. The book, though abridged, contains all that is necessary for the purpose of young people. It is not everyone who appreciates Jane Austen's extraordinary life-like miniature description of ordinary people living ordinary lives. This lack of appreciation was shared by such writers as Charlotte Brontë and George Eliot; but to most of us her work is intensely interesting. Anyhow, it is but right that young scholars of English literature should be introduced to such a master-writer of domestic description and sentiment.

President Wilson: The Modern Apostle of Freedom. Ganesh & Company, Madras. Price One Rupee.

This is a selection of the more recent speeches of President Wilson. It has a Foreword by Dr. (Sir) S. Subramanya Aiyer, and a sketch of the life of the President by Mr. K. Vyasa Rao. The book has a political object in view. "It is because Dr. Wilson pleads so strongly and nobly in favour of freedom to all, that his speeches will go far to produce the conviction (*i.e.*, that the Hindus are entitled to be free) amongst us, too, and thus prove of much indirect benefit thereby." Mr. Vyasa Rao's well-written "sketch" is principally concerned with the attitude of President Wilson during the period of the war. The speeches have been well selected, but, considering that they are intended to be widely read, they need in places some explanation and general editing.

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Narayan's Typewriter Manual (Three Rupees, 1918; Madras) deals exclusively with the mechanism of the "Underwood" Typewriter. The procedure adopted in explaining the parts and particles of the machine is admirable. The explanations offered by the author are immensely useful to the typist in every way, and the manual seems indispensable as a guide to those who operate on the machine.

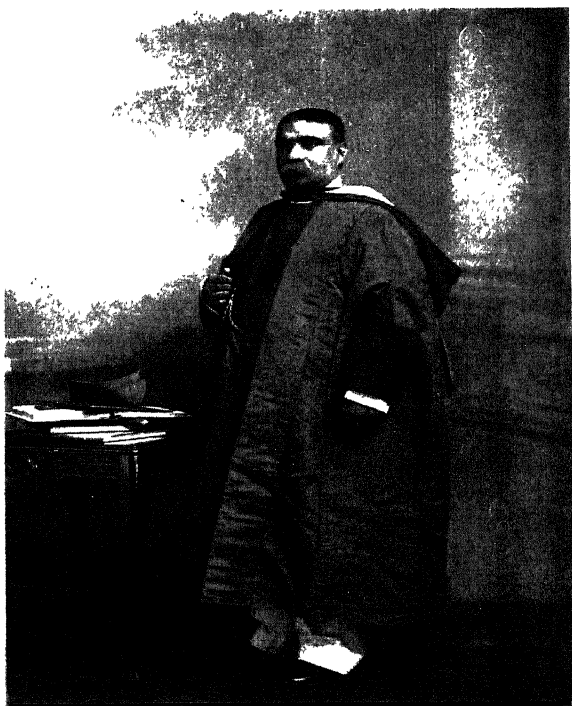
The pamphlet is full of illustrations, and these make it very easy even for a beginner to understand the uses of the different parts of the typewriter. The manual is a very creditable production in every way.

EDUCATIONAL NOTES

THE first convocation of the Benares Hindu University was held on the 17th January in the spacious quadrangle of the Central Hindu College. The large gathering of spectators included many distinguished scholars and educationists who had helped the University with large donations, prominent among whom were H.H. the Maharaja of Benares and his heir apparent, and many ladies. After the diplomas were conferred, H.H. the Maharaja of Mysore, the Chancellor, delivered his address, in the course of which he said the history of the Benares Hindu University illustrated the courage of the leaders of the movement, their capacity for sustained effort, their co-operation and their powers of organisation. After referring to the manifestation of India's effort towards self-determination and self-expression, which has done much to quicken the confidence of Indians in their capacity to take independent charge of education in all its grades, he warned them against the temptation of confusing patriotism with blind adoration of ancient days, coupled with a feeling of repugnance for everything modern and foreign. "No nation," he said, "is impoverished by commerce with other nations. No civilisation can suffer by intercourse with other civilisations and by an intelligent assimilation of the principles, ideas and practices that have proved to be beneficial to other peoples and countries." Some people thought that India was becoming over-educated, and pointed to the large number of students seeking admission into the different universities and to the glut that is in the market for their services. He suggested that the real trouble was not over-education but mis-education, by which he meant the giving of the wrong kind of education. Education needed to be impregnated with the spirit of industrialism, and the dignity of labour inculcated and exemplified.

Sir Sivaswamy Iyer, the Vice-Chancellor, then addressed the Convocation, and said that the Benares Hindu University had been started to remedy the defects in the present system of education. The University aimed to preserve and promote Indian culture by giving importance to Sanskrit learning. Referring to a remark recently made by Sir Rabindranath Tagore at a public meeting in Southern India, that in the Hindu University he could find very little that could be called really Hindu, the Vice-Chancellor contended that

the subject of proper religious instruction was still under consideration. The woeful indifference of educated men to the fine arts suggested a sphere of activity which the University would be justified in creating, if sufficient funds were forthcoming, by opening a school of music, architecture and town-planning, painting and sculpture. Referring to the system of education, he said that examinations had become the end of the student's life and have had



SIR ASUTOSH MOOKERJEE, LATE VICE-CHANCELLOR,
CALCUTTA UNIVERSITY.

a disastrous effect upon the system of education. It should be possible to check the evil, either by abolishing examinations or reducing their importance as a qualification for degrees. He mentioned the difficulties that stood in the way of accomplishing this, and said it would take some time after the University was fully organised for the professorial staff to acquire the confidence of the public in their impartiality and standard of judgment, when degrees of the University should practically be the certificates given by professors themselves. Lastly, he referred to the unfitness of

a majority of the students at the Matriculation stage to enter upon a University course. As a remedy he suggested to treat the Intermediate examination as the stage at which real University education should begin, and to extend the course of the B.A. examination to a period of three years.

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THE first Convocation of the Patna University was held on November 30th in Government House. His Honour Sir Edward Gait, the Chancellor, said that some years must necessarily elapse before the scheme for the establishment of a residential teaching university of a type new in India could be brought to fruition. It was impossible to settle the detailed plans of the various buildings before the University had been created and its Senate and Syndicate had come into existence. He hoped, however, that a final settlement would soon be reached regarding all matters affecting the size and arrangement of the university buildings and residential colleges which would be constructed in the first instance. Sir Edward referred to the educational revolution in well chosen words :—"It needs no prophet to say that the new era of peace which is about to be ushered in will witness a remarkable expansion of industry, trade and general progress. India has participated in the struggle and will reap her share of the harvest. . . . India stands to-day on the threshold of a period of industrial and political development unparalleled in her past history. So far as the material well-being of India is concerned, this question of industrial expansion is of supreme importance, and points to the necessity for more attention at all stages to the practical side of education and to the training of men who will not despise manual labour, who will be ready to go down mines and to tend machines. At present the supply of graduates tends to outstrip the demand, but the reverse will be the case when they are willing to apply their trained minds to productive forms of labour.

IN April, 1918, a letter was addressed by the United Provinces Government to district boards, directing them to prepare a programme of progressive expansion in primary education for five years. In a Resolution, published in the "United Provinces Gazette" of the 9th November, 1918, the proposals of the boards are reviewed, and the Local Government explains what action it intends to take. To carry out the proposals of the boards it would be necessary to increase within five years the number of schools from about 10,000 to 20,000, and of teachers from 19,000 to 34,000. The Local Government is well advised in limiting its programme to three years. If the boards work up to even three years of their schemes the enrolment in primary schools will increase by 60 per cent. The total annual cost of

primary education is at present 30 lakhs. The Local Government proposes to give grants aggregating 72 lakhs, in addition to the present grants, within the next three years; while at the end of this period, if the programmes are fully carried out, the recurring grants from provincial funds will have increased by 22 lakhs, and the total recurring expenditure will have risen from 35 to 52 lakhs per annum.

A public meeting was held last month at the Ram Mohan Library, Calcutta, under the presidency of Sir Profulla Chandra Roy, for the purpose of founding an institution to be called the Women's Education Society, with the object of giving an impetus to the cause of the education of girls and women in Bengal. A strong committee, with Lady J. C. Bose as secretary, was formed.

THE *Pioneer*, in commenting on the latest Report on Education in the North-West Frontier Province, says that contrary to expectation the educational problems of that Province are essentially the same as those of the rest of India. The main requirement is that of better qualified teachers, especially in English. Some attempt has been made to improve the prospects of the primary teachers, but not much. Our contemporary very properly complains that teachers in India, "have never received at the hands of the administration the treatment which the importance of their work entitled them to expect." A remedy is suggested which we have ourselves proposed. "If the experiment were tried of selecting a few Indian schoolmasters whose work is conspicuously good for a modest decoration in the next two or three Honours' List, the result would be to raise the whole status of the teaching profession in the eyes of the ignorant."

IN view of the declaration which has just been made by Great Britain and France in regard to their aims in Mesopotamia and Syria, it is noteworthy that efforts have already been made to provide educational opportunities for the people of the former country. The Government of India quinquennial report on the progress of education, says that a new normal school has been opened, and twenty-nine teachers have already passed the examination and joined appointments in six newly-established Government schools. There are also six schools in receipt of State aid. A survey school has been established, from which thirty-six boys have passed and been appointed assistant surveyors on probation. Young Arabs are also receiving in the engineering workshops instruction in practical engineering.

LORD WILLINGDON'S liberality in dealing with the Bombay Municipal Corporation in regard to the Government's contribution to the cost of the extension of primary education in the city, was a subject of a very agreeable discussion at a meeting of the Board held in December last. Whereas the Corporation had asked for a grant of one-third only of the additional expenditure on primary education, the Governor in Council had decided to help towards ensuring literacy in the city of Bombay to the extent of one-half the future expenditure.

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IN the course of an interesting speech at a prize distribution at the Sind Madrassah at Karachi, on the 21st December, the Commissioner in Sind, the Hon. Mr. H. S. Lawrence, C.S.I., said that Sind was the first province in India to receive the Muhammadan faith, and it was to-day the most orthodox in its observance of the religious tenets. The survival of the Mulla and the faithful devotion of the Muhammadan population to his ministrations were undoubtedly most creditable to the courage and constancy of the community. In proportion as his community has been attracted to the secular instruction provided by the British Government, the Mulla had sunk, said the Commissioner, deeper and deeper in poverty, and his struggles to acquire an orthodox education had been attended with greater and greater difficulty. The teaching of the Koran in the Muhammadan traditional method was condemned by the modern scientist as a useless waste of time. The important fact that during these earliest years the child was being taught reverence and submission to authority escaped the attention of these critics. In other parts of India the British Government found Hindu temples and Muhammadan mosques endowed with revenues on grants of land. In Sind, where, in place of a permanent system of land endowments, the Muhammadan religion was supported by personal recognition of individual religious teachers, not a single endowment existed for the support of any religious institution, whether Hindu temple or Muhammadan mosque.

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LORD PENTLAND laid the foundation-stone last month of the Raj Kumar College at Grange, on the north bank of the Adyar river. His Excellency said that the scheme was due to the foresight and generosity of the Maharaja of Bobbili, and to the recognition by the leading zemindars and landholders of the necessity of a liberal education, essential to the right use of their privileges and the proper discharge of their responsibilities. In the hope that the college would enable them to fulfil these obligations and responsibilities, the Madras Government cordially welcomed this practical evidence of the progressive spirit on the part of the zemindars, whose loyalty and public spirit had been amply demonstrated during the long struggle of the great war.

THE Secretary of State for India has sanctioned the proposal to place the Queen Mary's College for Women, Madras, on a permanent footing. Rao Bahadur C. Cunnan Chettiar, in conjunction with his brother, Dewan Bahadur C. Ramanujam Chettiar, has given one lakh of rupees for building a Women's Medical School as an adjunct to the Queen Mary's Women's College in Madras. Last year the college received an endowment of one lakh of rupees from the Maharajah of Jeypore for founding a special science section. The college, which is attracting women from all parts of India, is to be congratulated on its well-merited success.

HERE is a great stride forward in the right direction at last. The Government of Madras have passed orders on the proposals of the Director of Public Instruction regarding the medical inspection of schools and colleges, suggesting, among other things, that it would be a useful procedure if for each large school a suitable registered medical practitioner be engaged as a medical officer, who would arrange, in communication with the headmaster or other controlling authority, each term to examine newly-joined pupils, the medical officers also to make a periodical examination of the school buildings and premises and advise the school authorities regarding any sanitary defect. These suggestions are intended to relate primarily to schools. The pupils in colleges are older, and in many cases it is too late, by the time collegiate life is reached, to treat successfully defects in health. But in colleges in which the tutorial system has been introduced the assistance of tutors might be utilised as far as possible in connection with this scheme of medical examination, as they may have facilities for noticing whether the health or general condition of any student is such as to render medical advice necessary.

WE recently had occasion to refer to the membership of the Royal Society which had been conferred on Mr. S. Ramanujam, the mathematical research student who was studying at Cambridge with the help of a scholarship granted by the University of Madras. We have now the pleasure of announcing that Mr. Ramanujam has been elected to a Fellowship at Trinity College, Cambridge. There can be no doubt as to the greater honour of membership of the Royal Society; but the honour of being elected a Fellow of the leading college at Cambridge would be enough for most mortals, and it has the additional merit of carrying with it a convenient financial advantage. It is pleasant to know that here is a case where genius has met with due recognition and reward.

TWO books by Professors of the Mysore University are shortly to be issued. One is *Local Government in Ancient India*, by Prof. R. K. Mookerji, which will issue as part of the "Mysore University Series," and will be published by the Clarendon Press, Oxford, and seen through the press by Dr. Vincent Smith, the great authority on ancient Indian History. The other book, on *The Reign of Religion in Contemporary Philosophy*, is by Prof. Radhakrishnan. It is being published by Messrs. Macmillan & Co.

THE Travancore Durbar's Annual Report of Education for 1917-18, gives ample evidence of the desire to advance education in all directions in that State. A representative committee was sitting, but had not completed its report on the question of establishing a University for Travancore. We have referred to this subject more than once; and are in full accord with the proposal. In November, 1917, Travancore celebrated its educational centenary. A few extracts from the educational statistics will show that Travancore has every reason to be pleased with her progress. Eleven per cent. of the total population of nearly three and a half millions were attending school. Of children of school-going age, eighty-two per cent. were in attendance. This must surely be the record for any part of India, the average for the whole of which is something under ten per cent. Travancore is running some of the advanced countries of Europe very close. The gross expenditure on education was Rs. 19,42,356, which works out at ten annas a head of the total population.

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IT is extraordinary the impetus which is being given to the study of modern languages in England, the allied and neutral countries. French in England, English in France are being encouraged. Oxford has received £25,000 for a chair in French, and Mr. Arthur Serena has given £20,000 (three lakhs of rupees) towards the foundation of professorships of Italian at Oxford and Cambridge. Italy is founding eight chairs of English in her universities, and English is to be taught, after French, as a second modern language in her secondary schools. Chairs in Spanish, Portuguese, and Modern Greek have been founded at London University, where provision likewise is being made for the Scandinavian languages and Dutch.

WE do not look for the chivalrous or generous treatment of women in Prussia, and we are, therefore, not surprised at the following remarks recently made by Professor von Wilamowitz-Möllendorf in the Upper House of the Prussian Diet. The Professor, like many other persons in Germany, resents the attendance of young women at

the universities, and is alarmed at the large increase of women students since the war began. But though the increase is great, the total is remarkably small for the number of the population. Between 1914-18 the number of women students in all German universities has increased from 3,693 to 6,527, and in Berlin University alone from 880 to 1,322. This has disturbed the equanimity of the classical professor who, among other things, said in the speech to which we have referred :—"The girls who come into our hands are given their leaving certificates from school in the same friendly fashion as the boys who want to fight. We at the universities can do nothing but take them, for they come with certificates that they know enough. The people who give them such certificates do not trouble about the ninth commandment; they bear false witness in favour of their neighbours. One is reduced to the position of a fourth form master. I am sorry for the poor girls, and I do not blame them; I come down to their level. But I really do not think that I was appointed to be a fourth form master." Poor Professor! we would rather say. The girls will survive his contemptuous pity.

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IT is most gratifying to learn that several manufacturing firms in England have ignored the temporary concessions offered in the Fisher Education Act, and are affording educational facilities to their young employees up to the age of eighteen. At Batley, in the West Riding district, seven firms have combined, with the result that 250 young men and women are receiving continuation education without loss of wages. A Bill, somewhat similar to the English Bill, making continuation schools compulsory for young people, is hanging fire in France. But it is sure to be passed when other educational necessities consequent on the war have been met.

THE following passage on education and child welfare occurs in a statement of the Coalition aims and policy issued by the Prime Minister :—

"Our recent Education Act shows our purpose here. We shall pursue the policy of perfecting our education system, our educational methods. Never were John Knox's words truer than in these days of scientific progress that, 'Every scholar made is an addition to the wealth of the community.' I am also profoundly convinced that we need to devote more thorough and systematic care to child welfare problems and the care of the mother before and after childbirth."

Mr. Lloyd George, on another occasion, said :—"Two of the most progressive and democratic education measures that have been carried for the last fifty years were the English Bill of Mr. Fisher and the

Scottish Bill of Mr. Munro. You look at those two Bills. I tell you they are going to leave a mark on the history of Britain. They are going to give equal chances to the children of those who cannot afford to spend money on education just the same as the children of those who have got money to spend. There is going to be an equal opportunity for all lads (cheers), so that the lad of brains can as easily get up to the top under those measures from the lowest rung of the ladder as he could if he belonged to the middle class, or to what is known as the upper class. Equal opportunities for all children. Those two Bills were carried by 'a reactionary Government.' "

IN spite of heavy taxation and high prices, numerous are the educational endowments which the great war is calling forth in England—and we must remember that £ 20,000 amount to three lakhs of rupees.

Major David Davies, M.P., has addressed the following letter to Sir John Williams, President of the University College of Wales, Aberystwith :—

" It has occurred to my sisters and myself that the University of Wales and the Council of the College may be willing to allow us to found a Chair of International Politics at Aberystwith, in memory of the fallen students of our University, for the study of those related problems of law and politics, of ethics and economics, which are raised by the project of a League of Nations, and for the encouragement of a truer understanding of civilisations other than our own. We are prepared to contribute for this object the sum of £20,000, and we should be glad, if our proposal is accepted, that the Chair should be associated with the illustrious name of President Wilson."

THE question of the revival of cottage industries in England will be of interest in India, where the village is still the economic centre and where rural industries are in danger of disappearing. Lord Henry Cavendish-Bentinck, M.P., recently presided at a conference at Barnett House, Oxford, on the development of rural industries in England. Miss May Morris (a daughter of William Morris) urged that the future of country industries involved consideration of how the decay of existing crafts in England might be arrested. Her father had lived and laboured for the welfare of the arts, and this meant to him not only the fine arts; it meant also the lesser crafts formerly pursued in the villages, as in the craft guilds of the cities. He laboured to make people realise what wealth lay submerged in this our England; what talent lay there unused, crushed, despised; the pride of work, the traditional skill of the hand, the inheritance of all their village folk through the centuries until the great upheaval of

machine industry. English handicrafts had a very high reputation all over the world, yet the output was limited and handicapped by all sorts of economic difficulties and want of steady practical encouragement.

SIR RABINDRANTH TAGORE.

(Photographed by Mr. M. P. Subramania Raj Urs, Mysore.)

SCIENCE NOTES

The Place and Importance of Science in Education.—This is the title of an address delivered at Manchester before the Association for the Scientific Development of Industry, by Mr. E. C. Reed. Mr. Reed alludes with satisfaction to the awakened interest of all classes towards science and scientific questions, largely induced by the events of the war, and warmly pleads, with a variety of vivid illustrations, the claims of scientific knowledge and of scientific methods of imparting it as a fundamental part of every educational system. "The result of our neglect of science," he says, "has revealed itself to us in waste, muddle, and inefficiency in practically every department of our national life," whilst, on the other hand, "wherever we have resolutely endeavoured to make good our past deficiencies, the effect has been wholly beneficial." From these postulates he proceeds to argue powerfully for a new method and purpose in our educational system. "For every national purpose," he says, "brains are of more use than bodies," and "the most mechanical job is the better for a little intelligence." But it is not merely on the ground that a training in science and scientific methods would make the nation more effective in its industrial and commercial activities that the author pleads so powerfully for the inclusion of scientific aims and training in the curriculum of the schools from the earliest period of child-life, but from the much higher consideration that only in so far as this is done can the real, permanent well-being of the nation, both material and spiritual, and of the individuals comprising it, be achieved.

The Association has published the above address in the form of a pamphlet (price 3d.), which is accompanied by a diagram showing the place of science in the service of man, and its importance in industry.—*Nature*.

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Armour-plated Seed Fertilized by Electricity.—In the latitude of Chicago it is estimated that the precipitation of nitrogen to the earth in the form of nitric acid by the natural electric disturbances in the atmosphere amounted to ten to eleven pounds of nitrogen per acre per year. In the tropics, where thunderstorms are more

frequent, a larger amount is precipitated, and vegetation is therefore, as we know, more abundant. Accordingly, we may expect that if we discharge electricity through the soil, we will not only stimulate the bacterial life to greater activity known to occur after natural electrical discharges, but will give the plants their principal food by producing combined nitrogen. In co-operation with the engineering department of a large electric company in Chicago, there has been in the past year successfully tested a newly patented process embodying this principle. High-frequency current is literally driven in a spray through the surface of the soil from special distributing electrodes embedded in the earth (about six inches deep), arranged parallel to each other on two opposite sides of the field along the fence lines, out of the way of cultivation. The seeds, before planting, are coated with a finely divided, non-deteriorating metal, with the object of creating lines of low resistance and a condition analogous to the coherer of a wireless set. Tests were made on eleven acres of corn and a few rows of sugar beets at Labard, Illinois. The increase in the corn production is estimated at thirty to forty per cent., with an increase in the value of the crop estimated at Rs. 80 to Rs. 115 per acre. It is claimed that the cost for current and metallic coating of the seed is less than two rupees per acre, and the net cost of the apparatus installed less than Rs. 650.—*Scientific American*.

The Industrial Development of India during the War.—Mr. D. T. Chadwick, in a paper bearing the above title, mentions a curious fact, *viz.*, that in spite of a forest area of more than 250,000 square miles imports of timbers into India exceed exports by some 250,000 tons a year. These imports consist largely of teak, hard woods and pine. In some cases wood is imported from Siam, when exactly the same was available locally and at a lower price. The development which has taken place since the war is due to the realisation of the vital necessity of utilizing local resources and by the adoption of scientific methods in this process. Inquiries are being carried out in co-operation with business houses in directions in which forest resources are essential to industries. In regard to sandalwood oil, a trade has been established which was formerly centred in Germany. Before the war sandalwood to the value of more than 15 lacs of rupees was exported annually. The factories established in Mysore since the war are now capable of producing nearly 3 lacs of rupees worth of oil per month of the highest quality, suited to medicinal purposes.

The manufacture of the alloys of iron has been commenced and, in addition, electric furnaces have been erected at Sakchi, primarily for the manufacture of steel for springs, tools and other purposes ;

but it is expected that these furnaces will be devoted to the production of ferro-chrome, ferro-tungsten and other ferro-alloys. The possibility of developing local resources for aluminium, calcium carbide, cyanamide, etc., turns on the supply of cheap electric power from the waterfalls of India.

Many chemical problems associated with industry in India await solution, and one of the activities of the Munitions Board has been to mobilize the chemists and allocate to them specific problems for solution. Hitherto, except in a few cases, chemists in India have been mostly employed in the educational departments in the various colleges, and have not been in touch with industrial problems. This knowledge and talent is now being utilized. A few of the items of research allotted to different chemists may be cited as indicative of the class of work undertaken; these are colloidal medicinal preparations, the causes which render bleaching powder unstable in hot climates, the proportion of suitable chromate by extraction from chrome-iron ore without the use of caustic soda or sodium carbonate, the refining of waste copper, the refining and preparation of several of the essential oils and varnishes, etc. One of the greatest needs of the immediate future is for more organised, practical scientific research into the industrial resources of India, alike in forestry, mineralogy, hydro-electricity and in the industries themselves. This is the factor which is destined to play a decisive part in the establishment of scientific industry in India.—*Nature*.

Wood Distillation.—In the July number of the *Journal of the Indian Institute of Science* will be found a detailed, general account of the scientific processes of wood distillation now in vogue in different parts of the world, and the results of the experiments that have been made at the Institute in the distillation of some South Indian woods. This paper on Wood Distillation is very useful in connection with the large iron works shortly to be started in Mysore. The first and the most important requisite for this industry is cheap, efficient fuel, and in the absence of coal and cheap electrical power, attention is naturally turned towards charcoal. The stack method of preparing charcoal has been in existence in India for a very long time. Though the charcoal obtained by this method is of a high grade, the yield is only 20 per cent. on the weight of the wood charred, against 30 per cent. obtained by the more modern closed retort processes. This is not all. The valuable by-products which in the old stack process were usually allowed to escape into the air as vapour are, in the modern processes of wood distillation, collected, and sold either in the crude form or worked up into marketable derivatives. The actual products obtained by distillation from the retorts are charcoal, wood

tar, pyroligneous acid and wood gas, the last being used for heating purposes, and the charcoal, when removed from the coolers, is in a marketable form. The derivatives include acetic acid, acetates of lime, soda, etc., acetone, chloroform, iodoform, wood spirit, creosote, pitch, methyl alcohol, formalin, etc.—a formidable list indeed! The modern method of wood distillation, though of comparatively recent origin, has now developed into an industry of enormous dimensions. It is estimated that about three million tons of wood are distilled annually throughout the world for the sake of the by-products, producing approximately one and a half lacs of tons of acetic acid and 35 thousand tons of wood spirit. As regards Indian woods, teak and casurina are said to give excellent charcoal, while some jungle woods, on the other hand, produce a soft, light charcoal of inferior quality. Though it is true that the Indian forests are immense, the most important ones are generally in mountainous and inaccessible tracts. This means increased difficulty in felling the wood and carting it to the factory, and transporting the finished products long distances before they can be sent by rail to places of consumption.

The chief problem for the wood distiller in India is, Can he turn out his products at prices that will enable him to compete with the American and European distiller? To compensate for the high freight charges between India and England he will have to manufacture his products at a cost rather below the average American or European cost. This necessarily means extremely careful selection of sites for factories and the provision of cheap raw materials, including wood, lime and sulphuric acid. The factory must be near a cheap supply of wood of suitable quality; it should be near a market for all the charcoal made, and proximity to a port is desirable in order to reduce to a minimum the freight charges on all products exported. Considering the disposal of the products as a whole, "any over-development of the industry might only end in disaster."

The following is a summary of the experiments carried out at the Institute:—(1) "22 species of South Indian woods have been distilled in the laboratory, and the yields of charcoal, acetic acid, methyl alcohol and tar ascertained." (2) "The results appear to agree approximately with those obtained under commercial conditions." (3) "The yields of acetic acid are low when compared with those from the woods which are usually distilled in other countries."

COLLEGE NOTES

THE MAHARAJA'S COLLEGE

To chronicle in detail the doings of the different college social activities during the past few months would be impossible with the space at our disposal. In October the usual "College Day" was celebrated, but as full particulars of this event were published in the newspapers it would be out of place to retail an account of the proceedings. In the same month the anniversary of the College Sanskrit Association was held. Professor Shah made an excellent chairman and an able speech. A paper was read by Mr. C. R. Narasimha Sastri, B.A., on "Some Aspects of the Sanskrit Drama," and a very creditable enactment of a drama of Bhāsa was given by some of the members of the association. In December the Armistice was duly celebrated, and the Rev. H. Spencer, B.A., gave an appropriate lecture or address, with Mr. R. H. Campbell, C.I.E., in the chair. The same month saw the inauguration of yet another College society—the Kannada Association. The inaugural address was given by Mr. M. A. Ramanuja Iyengar, of the Maharani's College, and Mr. N. S. Subba Rao, our principal, presided. The association will have the sympathetic support of Mr. B. M. Srikanthia, and this alone should guarantee its success. It is significant that the hon. secretary is a Muhammadan student, Mr. C. Mahomad Hussain. We like that immensely, for it would seem to show that the Muhammadan element in the College sees the advantage which their community will derive by cultivating the language of a State in which they are no mean citizens. Professor Rollo has this month (January) been giving a series of University Extension Lectures on the subject of "Studies in Dramatic Literature." The lectures have not attracted as many of the public as they deserved,—for which body such lectures are primarily intended. But large numbers of students attended regularly, and showed how thoroughly they appreciated the excellent fare offered. The last of these lectures was delivered in the new lecture theatre, which, now that it is fitted up with electric light, is an ideal building for such functions.

During the last fortnight we have been all agog with the doings connected with the visit of Sir Rabindranath Tagore. He has visited

nearly every educational institution in the city, at each of which he has either given an educational address or read one of his poems or plays. It was a notable scene in the College theatre hall when he addressed the students. Of course, the building was literally packed, and the students were wild with excitement. What touched us as much as anything was his remarkable friendliness and intimacy with one and all, even with the humblest of the students. As the result of his two weeks' visit we all regard him as a personal friend. His goodness culminated in his consenting to be photographed on two successive afternoons with different College groups, the staff and the different classes. We need not say how proud we shall each be to have such a pleasing memento of the poet's visit. And what a striking personality as the subject of the camera! It is nice to know that Sir Rabindranath Tagore will probably soon visit the city again on the return of His Highness the Maharaja. Mr. Andrews, Sir Rabindranath's private secretary, gave the College students two lectures on the English Language and Literature.

I am afraid our athletic activity has not been in such evidence as our other activities. But our two additional tennis courts were opened this month. The courts have now about sixty members, whose systematic play has been carefully arranged by grouping. It was good news hearing that Government has sanctioned the scheme of physical culture passed by the Senate last year. The appointment of Physical Directors will put our athletics on a sound footing, and "something doing" will probably soon be recorded in each athletic department.

THE CENTRAL COLLEGE

THE inaugural address of the Physical Science Club was delivered this year by Mr. D. V. Iyya, Superintendent, Bangalore Power and Lighting. The address was on the Panama Pacific Exhibition, and was illustrated with lantern slides. Two ordinary meetings of the Club were held, at one of which Mr. K. R. Narayana Rao read a paper on "The Theory of Compressible Atoms," and at the other Mr. M. G. Srinivasa Rao gave a lecture on "The Utilisation of Waste Products."

A preliminary meeting of people in Bangalore interested in the study of mathematics was held under the presidency of Professor M. T. Narain Iyengar, in the Central College, to consider the desirability of forming an association to promote the study of, and research in, mathematics. It was decided to form an association with the above object, called the Bangalore Mathematical Association, and a committee, consisting of Messrs. E. P. Metcalfe, M. T. Narain Iyengar, B. Venkatesachar, and Venkata Krishna Rao, was formed to frame the association rules.

Professor F. L. Usher was President of the Chemistry Section of the Science Congress, held at Bombay in January, 1919. In his presidential address Professor Usher gave an interesting discourse on the evidence for the transmutation of metals, being an account of the research carried out by the late Dr. Ramsay and his pupils on this subject. Professor Usher was himself one of the pupils who took part in this investigation. In an article on the Science Congress, the *Times of India* says:—"In the Chemistry Section, Mr. Usher, of Bangalore, is a chemist of wide reputation and much skill as a public lecturer. His address on 'Explosives' at a former meeting of the Science Congress will be long remembered."

The influenza epidemic interfered sadly with the meetings of the Debating Society. But two interesting meetings have been held, one when a paper on "Modern Tendencies" was read by Mr. M. L. Annappa, of the 3rd year B.Sc. class; and the other when Professor Sell read a more than ordinary interesting paper on "The Fools in Shakespeare" to an overflowing house.

Football and hockey are in full swing. We won all our football matches against the Hindu Eleven, the Government High School and other clubs. The standard in tennis is high, and our champion, Mr. R. S. Raja Iyer, won the Dasara Open Singles Tournament, the finals of which were held in Mysore at Christmas. Just now we are having tournament matches open only to College and Hostel members, including the staff.

COLLEGE OF ENGINEERING

THE season after the last notes were written became very dull and melancholic for some time, owing to the wave of influenza that passed. As in the case of other colleges, students of this institution also suffered badly from the epidemic in October last. Many of the second year students who were out on a geological tour in the neighbourhood of the Marikanave Dam were taken ill during the trip, and the success of the same was not a little marred owing to this reason. However, all have recovered their health and elasticity to a great extent, and the second year class is busy with preparations for the ensuing Intermediate Examination in Engineering. The first year students were engaged recently in surveying practice for about 18 days in the rough country beyond Malleswaram extensions, and during this period almost every student worked rather late in the afternoon every day. Practical work of all kinds is being appreciated by the students, and they are taking a keen interest in their work in the foundry and carpentry shops. The Students' Engineering Association and its Magazine (published type-written) are developing in a satisfactory manner. Rajasabha Bhushana Rao Bahadur K. Krishna

Iyengar delivered a very interesting and stirring address during one of the meetings of the Association, giving very useful and practical advice to the students in connection with their college education and success as engineers. The development of the Athletic Club is more or less at a standstill for want of a suitable playground. Almost every bit of open ground in the neighbourhood of the College is occupied by buildings, and the lot of the students in Bangalore is more or less all work and no play.

THE MAHARANI'S COLLEGE

NOW that the College classes, with the Entrance class also, are to be placed entirely under the University control and management, it is hoped that the College will, in the usual course, be made a self-sufficing unit. It is highly pleasing to us, and quite consistent with this age of progressive activities that we are to have a separate Women's College in Mysore.

We have just got a small library for our College, as distinguished from the general library of the whole institution, and its recent date may be seen from the fact that most of the books are uncut. An improvement, since this official year, has been made in the reading room arrangement, by which students are encouraged to resort to it oftener and derive greater benefit from the perusal of the journals and magazines subscribed for.

The Debating Society has had a long period of rest, owing to the influenza epidemic, examinations and other minor causes. However, the last meeting for the year just ended was held in November. It was well attended, as the subject was one of special interest to women, the more so, perhaps, as it is now seriously engaging the attention of our educational experts. The subject was "The Kind of Education Best Suited for Indian Women." The discussion was long and hotly contested, and one girl boldly asserted that "We must be set free from the bondage of domestic drudgery" if we are to make any intellectual progress!

We celebrated the Armistice Day in our own way. Sports were held and were keenly competed for, although it must be said that not one of us college students won a prize. But there was plenty of cheers, music and sweets. Nearly 500 students assembled in the college hall and saluted the British flag, marching past two by two.

It is but right that this short account of our college life should close with a fitting tribute of respect to Sir Rabindranath Tagore for his memorable visit to our College. We have had the unique honour and good fortune of listening to the great poet reading one of his own pieces to us. His musical and soul-stirring voice seemed to vibrate in every nook and corner of the hall. The rich voice, the serene face, and

the appropriate gestures were all so eloquent, and added such a rare and splendid charm the like of which we had never witnessed before. We had, of course, heard of his greatness as a poet, of the simplicity of his character and the depth of his patriotism. But the glory and the actual reality of his presence far surpassed all our expectations and imagination. We were also permitted the honour of a personal introduction to the poet-sage. When we had the privilege to know his views on women's education.

MYSORE UNIVERSITY CALENDAR

1918-19

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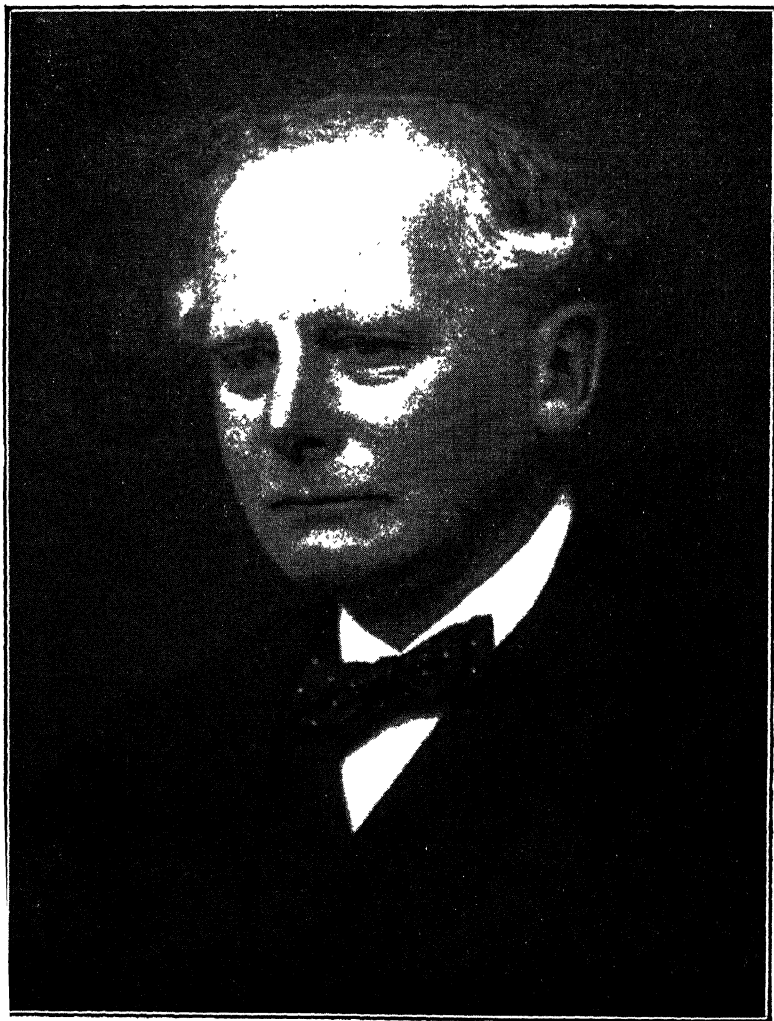
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SIR MICHAEL SADLER,
Vice-Chancellor, Leeds University; Late President, Calcutta University Commission.

THE MYSORE UNIVERSITY MAGAZINE

AUGUST, 1919

EDITORIALS

THE present editor in issuing the last number of the *Mysore University Magazine* for which he will be responsible, wishes to thank those who have shown their appreciation of the Magazine by subscribing to it, and to express his gratitude to those who have so ably and generously contributed articles, reviews, and notes to its columns. Disinterestedness is not yet banished from the earth when exacting work of this kind is forthcoming without thought of remuneration. But although the retiring Editor is proud of the fact that not a word which has appeared in this Magazine has been paid for, he feels that it has involved a strain which it is not desirable to continue. He trusts that the Magazine will still further develop its usefulness as the organ of the Mysore University.

* * * * *

SIR Asutosh Mookerjee, late Vice-Chancellor of the Calcutta University, who showed his interest in the Mysore University by delivering the first convocation address, has given a further proof of his regard by presenting the University with a large-sized, handsomely framed photograph of himself in his Doctor's robes. The picture is finding a fitting place in the University Union at Mysore, where it will constantly serve as a source of inspiration to the members of the University. Those who heard Sir Asutosh's eloquent convocation address at Mysore are never likely to forget the pleasing impression made by his commanding presence. His portrait will give zest to their memory, and it will also be a source of interest to those who have not seen him in the flesh, but who have heard of the great work he has done and is still doing for the Calcutta University. We thank Sir Asutosh Mookerjee most heartily for his unsolicited and much appreciated gift.

WE are sure that the readers of the *Mysore University Magazine* would like to associate themselves with us in heartily congratulating Sir Michael Sadler on the knighthood which has been bestowed on him in recognition of his services as President of the Calcutta University Commission. The knighthood well becomes one who by nature is so courtly and knightly, and who is inspired by such lofty ideals for the educational regeneration of the world. Equally pleased we hope our readers will be with the reproduction in this issue of the latest photograph of this pioneer in education.

THE Mysore University has now completed the first three years of its existence, has passed through a transitional period of partial affiliation with the Madras University, and is now fairly launched on an independent career. For this reason, and also because of the reconstitution of the Senate and some other changes, it seems fitting to draw attention to what has actually been accomplished, as well as to what is in contemplation. It may seem a little out of place for this Magazine to say that it is a matter for congratulation that so much has been accomplished and so smoothly in this period of initiation—but it has to be said. Lines of progress, too, are well indicated, and we need but to go slowly and surely to ensure an evenly-balanced development in the future. For what has been accomplished much credit is due to Government for its sympathetic attitude and support in most matters, and to the staff of the different colleges for their loyal co-operation in carrying out measures, in some of which probably a few professors and others had not much faith. Nor must we forget the disinterested labours of the Council in its long monthly meetings, nor the enthusiasm and long-suffering of the Senate. The Arts and Science Faculties, the different Boards of Studies and the numerous Committees also deserve their meed of praise, for they have done good but unobtrusive work. All these elements have contributed to the smooth-working and success of the University, and a generous acknowledgement of this fact is by no means out of place in this magazine.

Since the University was started in 1916, the following courses have been instituted :—Engineering, Bachelor of Commerce, Bachelor of Science and Master of Arts. The Entrance Classes of the Collegiate High Schools have been periodically inspected and reported on by the university professors; the tutorial system has been introduced, the hostel accommodation at Mysore has been considerably increased, and the inspection of the private lodgings of students has been undertaken as part of the duty of the Hostel Committees; the organization of the University Library and re-organization of the Sanskrit Library have been undertaken. Several courses of Extension

Lectures at the two university centres and several mofussil towns have been delivered; and the Publication Bureau has in hand several books in Kannda on useful subjects likely to appeal to the educated Kannada public. More recently, control of the Maharani Women's College and the Entrance Class has been transferred to the University, and additional members have been given both to the University Council and the Senate. Of the schemes worked out for being brought into force in the immediate future are the Physical Culture Scheme, the M.Sc. course, and the Medical and Law courses. Schemes under preparation are the Bachelor of Teaching course, the Agricultural course, the M.A. course in Kannda, special courses of studies for women, the substitution of the B.Sc. course for the present B.A. in science subjects, the introduction of a B.Sc. Honours course as a test for admission to the M.Sc., and lastly, courses in non-examination optional subjects. Thus there are schemes already worked out and in operation, and schemes which are worked out and others under preparation for introduction in the future. The lines of development are well marked out, and it will take many years to realise these different suggested courses. The University, then, will do well to concentrate its attention on the realization of what it has in hand, and to set its face against the introduction of other courses, at least for some time to come. The University started on its career without ostentation; it has soberly pursued its course without display, and it may with confidence look forward to a future of steady development and increasing appreciation from all but the most perversely hypercritical.

A CRITICAL but very sympathetic article on the Mysore University appeared recently in the columns of the *Madras Mail*. It was based on, what the writer of the article very justly called, the "be-lated" public appearance of the Report for 1917-18. It deals with several matters on which we would comment if space permitted; but the reference to the standard of the University examinations is specially important and deserving of attention. In commenting on the low percentage of passes in the University examinations, particularly the Entrance, the *Mail* questions "whether educationists will agree that the low percentage is due mainly to the high standard of the examination." We think the contention is sound, and would say that the low percentage is due mainly to the inefficiency of the candidates, and only in part to the high standard of the examination. As the result of some experience and intimate knowledge, we would say that the factor of inefficiency is to that of a high standard of examination as 3:1. The figures connected with the Entrance Examination for the last three years are very striking. The percentage of

passes in 1916-17, the first year of the examination, was 49. In 1917-18, the number of candidates almost doubled, and the percentage of passes fell to 34. This year, 1918-19, again the number of candidates almost doubled, and the percentage of passes fell to 28. Unless then we can say that the standard of the examination has been deliberately raised year by year, which of course no one will venture to assert, the conclusion seems obvious. It is, that with the increasing number of candidates for the Entrance Examination, a far greater proportion of the candidates are unfit as compared with the number three years ago. In other words, the standard of the S.S.L.C. Examination has, consciously or not, been considerably lowered during the same interval. The University, then, cannot be held responsible for the main cause for the failures in the Entrance Examination. That cause must be sought for in the inefficiency of the schools and of the S.S.L.C. Examination. The Entrance Examination this year has ruled as unfit for a college course so many as 72 per cent. of the candidates for admission, and from this point of view the efficiency of the University cannot be called in question. But having passed that test, candidates should be able to look forward with increasing confidence to their success in the final examination. Such confidence is not misplaced in universities outside India, and we hope that this will, in course of time, be the experience of the Mysore University, and that the great majority of B.A. students will pass their final examination at their first attempt. Jealous admission, good teaching, and continuous application should, as a matter of course, produce this desirable result.

It has been weary waiting for the Report of the Calcutta University Commission, but at last it has come (August 9th)—just four months after the Report had been seen through the Press by the Commission, and one year and ten months after the Commission began its sittings. The delay in issuing the Report after the dissolution of the Commission was due to the fact that a body of experts was summoned to Simla to report on the Report! Besides the inconvenience caused by the delay to an expectant public in India and to the Parliamentary Committee sitting on the Montague-Chelmsford Reforms, an apprehension arose that the Report was being subjected to revision. There was, however, no ground for this fear, for the Report has been issued intact in five octavo volumes each averaging 400 pages, and eight volumes of appendices, statistics and evidence. A *magnum opus* indeed! We were once confident that this issue of the Magazine would be teaming with extracts from, and comments on, the Commission's Report. But at the stage at which the preparation of this month's Magazine has arrived, it is impossible for us to

comment on the numerous suggestions made by the Commission. This would have been a labour of love; but what we eagerly anticipated doing, we must reluctantly leave to our successor. But there is just one recommendation made by the Commission to which we will briefly draw attention. The main recommendation made by the Commission is that "the stage of admission to the University should be (approximately) that of the present intermediate instead of that of the present matriculation. The duty of providing training at the intermediate stage should be transferred from the Universities to new institutions to be known as "Intermediate Colleges," some of which should be attached to selected high schools, while others should be organised as distinct institutions." It follows presumably from this that the university course is to be a continuous one of three years, preceded by an intermediate course of two years. It also follows that the complete course from the High school final examination will be one of five years, and not of four years as at present—an ideal arrangement if only public opinion will tolerate the addition of another year to the post-school course. We cannot help being gratified that the Mysore University course is identical in kind, though not quite in degree, to that suggested by the Calcutta Commission. The Mysore B.A. course is a continuous one of three years, and it is preceded by a one year's course at selected collegiate high schools where the boys are specially prepared for the University. Undoubtedly two years at an intermediate preparatory institution would be better than one, and if the suggestion of the Calcutta Commission is accepted Mysore may possibly follow it. But considering the large number of candidates for admission to the University who are annually rejected, the two years' preparatory course is already virtually in practice at Mysore.

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SINCE the last issue of this Magazine, there have been several important pronouncements in India on the subjects of industrial and commercial education. Sir P. C. Ray's criticism in the *Modern Review* on the report of the Indian Industrial Commission has been replied to by Sir Alfred Chatterton, a prominent member of that Commission. Sir P. C. Ray takes a very pessimistic, even lachrymose view of the present condition of India's industries. But it is little practical purpose to keep harping on the wrongs or glories, whether imaginary or real, of the past. It is also, we think, a radically wrong view of the existing industrial processes which sees in the future "all the wealth in the bowels of the earth carried away by foreign exploiters and only empty dark caverns and subterranean vaults and passages left behind." Unfortunately, Sir P. C. Ray has really no practical solution to offer, though he has plenty of faults to find with a Commission which at least makes an attempt at a solution

with which we should have thought Sir P. C. Ray would have had some sympathy. "Recruits for the scientific services should be drawn as far as possible from the Indian universities and institutes. At first it will be necessary to import a number of specialists from England, but the ultimate object should be to man the services with officers trained in this country."

A meeting of the Central Council of the Association for the Advancement of the Scientific and Industrial Education of Indians was held last April at Calcutta. The report had very promising facts to place before the public. A large number of properly qualified Indian students had been enabled to visit Europe and other foreign countries to study arts and industries. Of these, 164 had returned, and of them 140 had found good appointments. This year it is proposed to send as many as thirty students to foreign countries to qualify in industrial subjects such as can be developed in this country. The Government have very generously made an yearly grant of 5,000 rupees to the Association, and from rupees twelve thousand last year the finances have risen to rupees thirty thousand during the present year. An Association like this is performing services of the highest value to India at this crisis in her industrial development; and patriotic Indians might do worse than to come forward with subscriptions for the extension of its work.

Lastly, we have a very out-spoken speech by Sir Rajendranath Mookerjee on the question of commercial education, recently made at the Government Commercial Institute, Calcutta. There is much outcry against the employment of young Europeans in commercial houses in this country, and the preference shown is generally and and ignorantly attributed to racial prejudice. Sir Rajendranath Mookerjee completely disposed of this fallacy, and showed that if Europeans took precedence of Indians in this matter, it was because they were better qualified, chiefly by reason of having served an arduous apprenticeship in England before coming to India. Sir Rajendranath Mookerjee had no scruple in declaring that Indians are handicapped by their religious and domestic institutions. It is not only that the system of education is defective, there is also "the pernicious habit of early marriage" which is a sufficient bar to young Indian graduates being able, even if willing, to undertake a course of apprenticeship after completing their university career. It must ever be borne in mind that valuable as a college commercial course may be, it must be supplemented by a thorough business training to qualify a man to take up a responsible commercial appointment.

* * * * *

THE Calcutta University is fertile in supplying surprises, and we no sooner recover from one shock than we find ourselves con-

fronted by another. This time it is the very considerable all-round enhancing of the university examination fees by the Senate, by which it is estimated that a sum of two and a half lacs of rupees will be added to the revenue of the University. Money is urgently wanted, and as no further financial help from Government will be forthcoming and no other readily accessible means are available, the aspirants for a degree are to be tapped for the necessary funds. The resolution, which was introduced by Sir Asutosh Mookerjee, met with a spirited opposition on the part of a few fellows, but was carried by an overwhelming majority. There is no need to tell our readers that, the world over, there is a tendency to remove or lessen the tax on knowledge, and to offer equal facilities to the rich and the poor. Sir Austosh Mookerjee is, of course, not unaware of this trend; on the contrary he has publicly appeared as its fervent advocate—as witness his eloquent appeal in his address at the last Convocation of the Mysore University. He even went so far, remembering perhaps that the Mysore University Senate was almost equally divided on the subject, to advocate free education. “Lay no tax upon the acquisition of knowledge, demolish the toll gates which bar the passage of light.” We sympathise with Sir Austosh in his apparently irreconcilable attitude then and now. He would probably deny the element of irreconcilability and say that his principles have not changed. On the one occasion he viewed the question as an idealist, on the other as a practical man of the world; and although he still thinks free education an excellent thing to aim at, he is wise enough to bend to circumstances. We feel this is the right way to view a matter which has given concern to so many admirers of Sir Asutosh Mookerjee.

From the fact that the Senate has passed a resolution enhancing the fees for the different university examinations, it does not necessarily follow that the resolution will take effect forthwith. The resolution, indeed, has been submitted to the Government of India, and this authority will have the ultimate decision inasmuch as enhancing the fees necessitates a change in the Regulations.

SIR John Woodroffe, Judge of the High Court, Calcutta, has rapidly forged to the front as the champion of Indian culture, and he is now a veritable Indian among Indians. He expresses himself in unmistakeable language; but we cannot say we agree with everything that he says, though his main contention is right. At the ninetieth annual commemoration of the Oriental Seminary, Calcutta, Sir John made a very interesting and striking speech. Speaking of the present educational system, he said that external, *i.e.*, English, control, is destructive of organic growth and true freedom, and that although the position is topsy-turvy and unnatural, it does not strike many of

the Indian people as being so, for the reason that they themselves are the products of this "unnatural, deracialising and devitalising system." We should rather say that at present day it is only a small minority of the educated Indians who do not view the position as does Sir John Woodroffe. His further remark that Indian students come out of the schools and colleges without knowing anything of their past, is scarcely in accordance with the facts. In recent years, at least, the history of India has not been made, as he says, to commence with the Mahommedan conquest. On the contrary, more and more attention is being paid to the early part of Indian history. We ourselves, too, have more than once remarked on the extraordinary anomaly that an Indian student cannot take his B.A. degree in his own language. Sir John would not abolish the study of English or any other useful Western knowledge; and we can only presume that he would give such knowledge a subordinate place in the Indian curriculum. In another part of his speech he remarked that one of the reasons why Mahommedans in this country retain their religion, ethics, and manners is due to the greater care they bestow to see that the primary education continues and fosters their traditions. Our comment on this is that one of the reasons why the Mahommedans in India lag behind the Brahmins in secondary education is that they pay comparatively far more attention to the inculcation of religious traditions during the early years of their children than do the Brahmins. We are glad to find ourselves quite at one with Sir John Woodroffe in some of his practical suggestions for the development of Hindu culture. One suggestion we strongly favour, and that is that the walls of our schools should be sand-plastered and decorated with frescoes by Indian artists showing the figures and incidents in the secular and religious history of the people. Most of our schools are barn-like in appearance both outside and inside, whereas they might be made to suggest an atmosphere of beauty in a form which would be a constant suggestion to the pupils of their past and a stimulus to their faith in the future.

THE cause of women's education in India has lately been brought into prominence by the laying of the foundation stone of the additional buildings for the Queen Mary's College in Madras and the holding of the first Convocation of the Indian Women's University. The remarkable success and development of the Madras institution is most encouraging, and that extensions to the college, involving an expenditure of two and a half lacs, should be necessary in so short a time from the start shows that, in the words of Lord Pentland, women's education has been placed on an unassailable basis. The Queen Mary's College is, as many of our readers are aware, affiliated

to the Madras University, in the examinations of which it has been extraordinarily successful. A very different institution is the Indian Women's University which grants degree of its own, and teaches up to the degree through the medium of the vernacular. At its first convocation only one lady took the degree, a fact which is by no means a measure of the usefulness of the University. In Mysore a step forward in the higher education of women has just been taken by the formation of a separate college for women. It is at present temporarily housed in the building familiarly known as the Maharani College for Girls, but will soon be located in a building of its own. The step taken is fraught with the highest import for the education of women in the Mysore State. When housed in its own building within the University area, its rapid development may be confidently expected. As a special exception, the entrance classes are to be located in the college, and this, in the circumstances, is an entirely satisfactory arrangement. These different developments to which we have referred would be welcome at all times in a country like India. But they are peculiarly appropriate and full of meaning in view of India's immediate political future.

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"WHAT to do with our graduates?" is an everpresent and pressing question. Many of our youth have no ambition but to take a degree, and then enter Government service or the overcrowded professions, the most available of which is the ill-paid and badly-served teaching profession. Nor can they be blamed when so little opportunity is afforded them to enter on other careers. Their university training has unfitted them, or at least not fitted them, for practical employment, and even if so fitted, such is the present condition of Indian industries, that there are comparatively few openings for educated men in that direction. Sir P. C. Ray, the well-known scientist, has a remarkable way of answering the question which heads this paragraph. "If I were made a Dictator of Calcutta for twenty-four hours, the first thing that I would do would be, not only to abolish the Law College, but to raze it to the ground, closing it for ten years." (But why raze the college to the ground if it is to be opened again in ten years?) He would have our most brilliant youth turn to industries for a living. Educated Bengalis were barely subsisting, while illiterate Marwaris and Bhatties had captured the industrial market and the wholesale European trade. Allowing for some exaggeration in the latter statement, it must be admitted that some of the uneducated classes are earning a livelihood quite beyond the powers of the ordinary graduate. For this Sir P. C. Ray holds the Calcutta University responsible for its making "a havoc of originality." To such straits are the educated class reduced in their search for employment, that Calcutta graduates (so we are told) are

serving as ordinary postman on Rs. 15 a month. If this is true, for we find it difficult of belief, then the question "what to do with our graduates?" will find a ready answer; or more likely, the supply of graduates will cease or diminish, and the question will not be raised.

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THE Universities of Oxford and Cambridge are slowly bringing themselves into line with the more modern British institutions. Within the last few months Cambridge has made Greek a non-compulsory subject for admission, while at Oxford a similar resolution was defeated in convocation by only six votes in a house of over six hundred members. At Cambridge a committee has been appointed to consider the possibility of admitting women students to degrees, and Oxford will shortly follow suit. In these matters undoubtedly the war has had its influence, and this is being still further exercised in the direction of the development of courses. Modern languages are being encouraged, and greater facilities are to be given to those research and post-graduate studies which mark the true university, but in which the older universities, considering their position and influence, have done comparatively little in the past. Such developments involve much expenditure, and the question has now arisen whether Oxford and Cambridge, probably the two most independent universities in the world, will accept Government help accompanied by conditions which, it is feared, will threaten their independence. We remember that similar apprehensions, including even the ruin of the universities, were conceived when Government in the seventies of last century issued a Commission to bring about long-needed reforms. But instead of ruin, increased prosperity followed reforms which threw down ancient barriers and made the older universities far more accessible institutions. Mr. Fisher, the Minister for Education, himself an enthusiastic *alumnus* of Oxford, is the willing, even eager, agent for administering the bitter pill. He admits to "gentle pressure" on the part of Government, but does not believe that the independence of the universities will be undermined by their acceptance of the grant. It is clear that Mr. Fisher, who is a radical educational reformer, thinks that it is essential that the older universities should develop on modern lines, and should not be above accepting the Government oversight which necessarily accompanies a grant of public money. It is worth noting that Oxford has accepted the proffered help, and Cambridge, so far, has refused it.

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THE question of a separate university for the State of Baroda has been discussed on and off by the local authorities for the past ten years. The matter is now receiving serious attention at the hands of a committee, and it has been prominently brought before the Indian

public by the distribution of a pamphlet written by Professor Seshadri, of the Benares Hindu University. Mr. Seshadri has no doubt of the wisdom of Baroda having a university of its own. He thinks the conditions for such are peculiarly favourable, and he outlines with skill the aims and courses which should characterise the new university. It is an able pamphlet, but errs if anything from taking too optimistic a view of the question. Universities are not run for nothing, and the matter of finding necessary funds for an efficient university is not one to be lightly disposed of. For some years Baroda has led way in compulsory primary education, and this is an activity which should not be stopped or handicapped for the sake of creating a university. Moreover, there is every possibility of a university being started at Ahmedabad, to which the Baroda college could be affiliated. But if the question of necessary funds presents little difficulty, we see no other reason why Baroda should not have a university of its own. It would scarcely be in good taste for a magazine which represents the Mysore University to throw cold water on a project for a university in a sister State. Many objections were raised against the creation of the Mysore University three years back, which now are found to have had little foundation in fact. The Mysore University has undoubtedly justified its foundation, and it is not improbable that the Baroda University will, if not hampered by lack of funds, prove to be equally successful. Small efficient universities are what India most needs at present, and their creation should not be objected to except for the most serious considerations. We are inclined to trust to the good judgment of His Highness the Gaekwar of Baroda in this matter; for he has proved himself a wise and beneficent ruler, especially in the matter of education.

HIS Excellency Lord Willingdon, Governor of Madras, at a recent meeting of the subscribers to the Rajkumar College, did well to state definitely the extent of the financial support which Government was prepared to give the new institution. He was pressed during the discussion to promise that the college should be treated as a grant-in-aid institution, on a rupee for rupee basis. This view His Excellency promptly repudiated—very properly we think. He said that Government were ready to lend land and buildings, and to undertake the cost of any further buildings as might become necessary. More than that they were not prepared to give. We think the claim put forward is both undignified and unwarrantable. Surely the Rajas and Zemindars of the Madras Presidency are in a position to pay for the education of their sons and relatives! We wonder what Sir Asutosh Mookerjee would have said had he been in Lord Willingdon's place!

FRANCIS Storr, whose death took place last April at the close of a long life of eighty years, deserves a passing notice even in India, where he may probably be remembered by some as the editor of the *London Journal of Education*. Of this paper he was practically the founder, for when he took it over in 1878 it was a small and struggling quarterly. Next year he turned it into a sixpenny monthly, and from that date up to 1918 he carried it on as sole editor. This journal is easily the leading periodical of its kind in England, and is also almost preeminent in the world. Its influence for good, especially on secondary education, is incalculable. Mr. Storr did much for the improvement and development of the teaching of modern languages, and among his other great interests were those of the training and registration of teachers. Would that a similar journal of education could be established for all-India! And it is certainly not to the credit of this country, with its three hundred million people, that the realisation of such a paper is next to impossible.

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THE question of the future position of the College of Science at Bombay, which has just been erected, is a most important one. There is a strong feeling, which we thoroughly share, that the College of Science should be naturally affiliated to the Bombay University, and not brought under the direct control of Government. Such a college would be in keeping with the post-graduate work of the University, and would give a great impetus to its development. With proper support, the College might develop into an institution similar to the Indian Research Institute at Bangalore, to which graduates of the Bombay University now resort. It seems to us that there should be no question as to the fitness of attaching the College of Science to the University.

IF the Bombay University is to have a Department of Sociology, as apparently it is, no better choice of an introductory professor than Professor Geddes could have been made. The chief obstacle in the way of making sociology a subject of study in our Indian universities is the dearth of qualified teachers, not only in India, but also in the West. Professor Geddes, who is known in India chiefly as a lecturer on town-planning, is specially qualified as a teacher of sociology, and the Bombay University is to be congratulated on having secured his services for a period of three years. The subject of sociology is really a difficult one, and being based on so many "ologies" lends itself to superficiality. But Professor Geddes may be trusted to make it both instructive and stimulating. The subject is another item in the small programme of the Bombay University as a

teaching university, and its introduction will help to give the University a higher status in the estimation of other universities.

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WE take it that a very striking compliment has been paid to the Missionary bodies in the Mysore State by the Senate and the Arts Faculty of the Mysore University. Out of eighteen Fellows elected, three were European Wesleyan Missionaries, and the fourth, Miss Butler, the lady Principal of the London Mission Girls' School, Bangalore. This is unequivocal testimony to the regard paid by Hindu and European voters alike, to the educational work of the Mysore Missionaries. Miss Butler's election probably implies more than this. Doubtless it expresses a feeling of chivalry for a lady candidate backed up by that best of credentials—successful devotion to a philanthropic cause. We do but anticipate the attitude of the Senate when we promise Miss Butler a cordial welcome, and a very respectful and sympathetic hearing whenever she wishes to give the Senate the benefit of her experience. We take the opportunity, also, heartily to congratulate Sri Rukminiamma, the Principal of the Maharani's Women's College, on her election to the Senate, of which she is already a nominated member. There are now two educational lady members of the Senate—a fact which speaks much for progressive Mysore, and should be an incentive to other Indian universities to do likewise.

WE have more than once drawn attention to the importance of securing the health of those who will become the adult population in the course of a few years. Medical inspection of school children is systematically carried out in most countries, and where this is done, a marked improvement in the health of college students is noticeable. We quote the following extracts from the Annual Report of the Kumbakonam Government College for 1918-19, because it strikingly confirms what we have so often said on the subject. "Four students of the college died during the year; two of them being particularly bright students. In my last college report, I had also to draw the attention of the Government to the grave state of ill-health in the Kumbakonam town and its resultant effect on the college students. And I would again urge the necessity for a brisk campaign against disease. Kumbakonam is one of the largest educational centres in the Presidency; and every year the physique of both the school and college students declines. Regular medical examination of college students would be a great help; although in most cases, it comes too late unless there has been regular medical examination in the schools."

THE PLACE OF "ENGLISH" IN INDIAN UNIVERSITIES

IT was stated recently by a high educational authority in Mysore, that the study of "English" in our universities was simply a means towards an end. He had in view a particular idea, which limited his statement. But there are very many, both inside and outside Mysore, who would deliberately make this assertion in the most general sense. "During the student's course" they would say, "the value of his English studies lies simply in the fact that English is the medium through which he attains his knowledge of such matters as history and science. Therefore, the better he knows it the better for his other knowledge. And after graduation its use is as a medium of communication. The public servant, the lawyer, the doctor, the merchant, need it. Inadequate acquaintance with it is a professional disqualification. Such practical values make the study worth while." And thus our great writers have their permitted function. Shakespeare may enlarge the administrative vocabulary, and Milton may add volume to legal eloquence. The orator, from college Union to Assembly, will be the better for his Burke, and Addison will always help to clarify office correspondence. Yet one wonders that the greater names are tolerated by these critics of our studies. Shakespeare's humour is not that of bench or bar, and his quaint conceits perplex the ways of current language. Spenser is an evil guide to lucid tabulation. De Quincey's language will not further conversation, or commend to the authorities a report on the food problem. Why not stick to grammars and felicitous studies of idiom; and, as "prescribed texts," have bluebooks, judgments, and medical journals? If English is just a means to an end, let us dismiss at once the idea of English literature; for the study of literature is the great "end in itself" among all university pursuits. This no one can deny; but it is asserted that certain vernaculars provide a literature that is adequate in finish and scope. This may be studied, and acquaintance with it made an "end," but English is a "means" only, a mere linguistic matter. It is necessary to be logical; and if English studies are to be viewed in this light most of the greatest work in English must go, being linguistically a delusion and a snare rather than a duly practical text-book.

Fortunately, this is not the students' point of view. 'They are instantly responsive to literature, and somewhat less concerned with "improving their English" than their professors would have them be. They would not willingly lose that rich enjoyment that makes culture. And they do come to realise, during their arts course, unless they are the victims of wooden lecturing, the incomparable richness and variety of English literature. The very beginning of discussion ought to be agreement as to this fundamental fact—that knowledge, whether theoretical or practical, must always be a distant second among the aims of education in an arts course, and that the prime aim is "power." In discussion of an arts course, the word "vocational" is the least relevant and most profane. The man is to undergo a process of all-round development; and so far as his *mind* is concerned two things are to be achieved. One is mental *discipline*. The other is the deepening, the broadening, the "sensitising" of understanding. There is no subject in the present courses that does not exercise both these functions; though, for example, the main function of scientific study is disciplinary, and that of historical study (which here is mainly from text-books, and cannot in the nature of things, be from sources) is mainly of the other kind. But the point is that the study of literature stands by itself, that for the producing of "power" it is worth more—ininitely more—than all other studies put together. This is not demonstrable to a philistine, but is instinctively acknowledged by anyone who has the slightest responsiveness to art. The saying that poetry is more philosophic, and of a higher seriousness, than history is not merely an Aristotelian tag, but a profound and practical truth. And those are out of court in any discussion of education who do not realise that fine art, and, in particular, literature, satisfies just that hunger in the student that reveals his greatest need. This is the only part of his study which is concerned solely with blood and sinew, and not with property. A means to an end, forsooth! One might well ask what *is* the ultimate end? The making of a livelihood, perhaps,—which is indeed a notable necessity, but seems scarcely an adequate definition of well-being or "blessedness."

Neither the study of English nor any other study can be permitted so to encroach upon vernacular study as to deprive the student of thorough acquaintance with the masterpieces of his own vernacular. Where such masterpieces exist, they ought to be for him the most valued part of literature, not merely for patriotic reasons, but because they are the most intimately adapted to his mind. In some English universities, and particularly at Oxford, it is curiously common to find English undergraduates, and graduates, very much better acquainted with Greek and Roman literature than with that of their own race. The system of study in the great schools, and in Oxford

itself, directly produces this result, which can be justified by no argument. If a choice has to be made between the literature of one's own people and that of another country, it is due to oneself to choose the former—unless, of course, it is unworthy of study at all. An Englishman can scarcely assess the value of the various vernacular literatures studied here; but such value as they possess ought to be brought out to the full in the arts course of an Indian university. As a rule, apparently, the student tends to neglect his vernacular, presumably because of its lack of practical usefulness. In Mysore the very important step has been taken of making the study of a vernacular compulsory throughout the three years' course, and this will do inestimable good.

There is a false tendency, however, to treat this study and that of "English" as a single department; and, in particular, in the degree examination excess of marks in vernacular is allowed to compensate for deficiency in English. To put it bluntly the man who is a failure in English, whose English is *not good enough* for graduation, is *pulled through* by his vernacular. Occasionally, *strength in English* may, on the other hand, compensate for weakness in vernacular. The one result is as bad as the other. Here we have totally distinct subjects; and as regards *each* of them the degree is supposed to be a guarantee of satisfactory attainment. The examiner in English, for example, keeps a pass-mark in his mind, as also does the Examining Board. The student who does not attain this passmark is unfit for graduation in English, which fact is not altered by his securing a hundred per cent. in any other subject under the sun. The man who becomes a B A., through getting 35 per cent. in English and 45 per cent. in another language, is simply a graduate by courtesy.

This is a question with regard to which the practical point of view helps one. In the B.Sc. degree *rank* is determined solely with reference to scientific subjects, since appointments to scientific posts are made on the strength of this degree. No man is dubbed first-class who is not first-class in *science*. There may be doubt as to the wisdom of this particular regulation. But at any rate, there is the sound principle, that when a man has to be "certified" in some particular relation, no other consideration should be allowed to intervene. And similarly, a man who fails in English is *not* a graduate in English, and that is all there is to be said.

To the study of what is fine in vernacular literature, then, prime attention is due; while, on the other hand, excellence therein cannot compensate for deficiency in English. But if the "means to an end" theory grows in acceptance, an inevitable policy will be the encroachment upon English by what are called optional subjects and not merely by those that have a high cultural value but by others also, poor in the qualities that pertain to "power" but serving as

means to the end of money-getting, and that of saving precious time after graduation. Other faculties, with their "vocational" training will seek to thrust their burdens upon Arts; and (with a logic that in all cases is the same) we shall have arts-classes facilitating entry into the office, the court-of-law, the medical practice, and even the workshop. Once admit the "vocational" taint, once permit ourselves to forget that the arts course is for the making of the man himself and not of his tools,—and there is no limit to our journeying from the paths of education. Such courses would first make their way in among the optionals; but such optionals as we have cannot rationally be ousted, and ultimately the time devoted to "English" would be decreased. It is well to state the faith that is in us that in no possible circumstances must the attention devoted to English studies be diminished.

The danger of this, after all, does not proceed from rival courses, but from the inability to recognise the supreme value of literary study. And indeed a curious tendency has shown itself of late to place English literature itself upon the defensive, by the suggestion (the exposition would be too bold an attempt) of conceived weaknesses and limitations. The antique saw that English literature is lacking in "spirituality" might well have ceased to interest by this time: yet it is still continually upon the lips of those who know the literature of no language. It is of course refutable even by the ordinary graduate, on the basis of the few texts he has studied, while the more consciously spiritual of English poets are never prescribed. How many intoners of the "materialistic English" cry have read a word of Vaughan, say, on the one hand, or of Francis Thompson on the other? But our graduates do, as a rule, know something of Shakespeare and of Milton, to name the writers whose works are most current in our "prescription," and have become well aware that "spirituality" is a matter of insight and not of analysis, and is not proved, but rather disproved, by morbid self-consciousness. But other suggestions are made, and sometimes by people whose names carry, and deserve to carry, considerable weight. For example, some months ago, a great poet read, under the auspices of this university, a lecture the very memory of which is a delight, but which contained passing strange doctrine. One would fain make detailed reference to it, but memory is shaky as to details, and one hopes that the lecture may be published. About one main contention, however, remembrance leaves no doubt. He considered that the English, from the very beginning, vitiated their literature by an unfortunate attitude towards nature. They set out not to learn from her in a "wise passiveness" (so far as I remember, the lecturer did not use this phrase of an *English poet*), but rather to master her and use her for their ends. You can prove any doctrine from the

Bible, if you are discriminating enough in your choice of quotation; and from English literature you can prove any tendency you please. With more limited literatures you are more limited in choice. But it requires a very rigorous aversion of the eyes to exclude from one's view the innumerable passages, from *Beowulf* onwards, in which English poets have uttered their reverence and adoration for nature. There is no note in her music that they have not sounded, to no force of hers, whether stern or gentle, have they failed to respond. "The message of the forest" *was* heard even in Arden, as truly as when the spirit of Marvell sought to "glide into the boughs" and every thought of his was subdued to the gentle greenery around him. The Sanskrit poets of whom the lecturer spoke were thus responsive, and in the wonderful exposition of their temper lay the value of the lecture. But if acquiescence be their single reply to nature, theirs is the limitation. The man who talked incessantly of "harmony with nature" was advised by Mathew Arnold to turn his attention to certain aspects other than her "strength and coolness." She may be kindly nurse and gentle teacher, but her impulses vary, and when she insists upon hostilities we must engage her. We must sometimes leave our parables of the "universal mother" and give our human superiority its due. Nor is the modern quietist reluctant to share in the spoils wrested from conquered nature. It was not a "wise passiveness" that made secure for him the highway of the seas.

Anyone is welcome to criticise the present *system* of training students in English literature. It can but be judged by its results, and the results are as unpleasing as they could well be. It can scarcely be denied that the ordinary graduate, when he leaves college, shakes from his feet the dust of his studies. He reads no more English literature. There are exceptions; but the average graduate *reads no more*, whether indeed of English or of any other literature. He has not been interested: not to put too fine a point upon it, he has often been repelled. How far his attitude is due to his own inertia does not concern us here. He has in any case the capacity to love literature; and though each professor does his best to put life into his classes and foster this love, the two melancholy facts abide that somehow or other this feeling of repulsion, or at least of reluctance, has been created in the average man, and that this average man has not been so equipped that he can easily and delightfully read for himself during the remainder of his life. What are the causes of this, and what can be done?

One cause, of course, is that the intercourse between professor and students is in very many cases a matter, almost entirely, of the class-room. It is difficult to say whether this is more unfortunate with regard to the language or with regard to the literature. To learn

English one must talk with Englishmen; while the full appreciation of literature is furthered far more by conversation and discussion than by any sort of class-lecturing. There are many students and few professors; but there is the will, and in Mysore we may look for a growing improvement as regards intimacy of relationship between the "teachers" and the "taught." But it is worth while to consider whether the course itself is not largely responsible for its unsatisfactory product. A hint may be found in the Draft Scheme drawn up, under orders of the Government of Mysore, for the Mysore University. After criticising "the present English course" (that of the Madras University) as involving a minutely detailed study of texts, and "the acquisition of philological and antiquarian knowledge," it proposes "to reduce considerably the detailed study of English authors," and states that "the object will be to encourage a love for what is best in English literature, to enable the student to imbibe the culture of the West, and to give him something of its critical spirit and method." The student "should have acquired a real taste for good English literature, to induce him to continue voluntarily his studies in that direction." This is sound doctrine. The trouble is that matters are taking very nearly their old course. The student is leaving college without that "taste," and without anything of that will towards further study. And one may suggest that the main reason is precisely that referred to in this Draft Scheme. We are *continuing* to indulge in the minutely detailed study of texts; and this study, besides being largely profitless and entirely wearisome, absorbs an enormous amount of time that might be used to much better purpose. What we gain in minuteness we lose in scope; and the result is a course so narrow that it totally fails to serve its purpose as an introduction to English literature.

"A real taste for good English literature." If we fail in fostering this we are not only frustrating the intentions of the founders of this university but failing in our work. We are encumbered by the habit of our present course. Let us try to see it, for a moment, as an educationist-stranger might. To such a stranger we should explain the routine of the day, the number and nature of the books we have to "get through" during the year, and the sort of knowledge which, when we turn examiners at the year's end, we demand of the student. He would probably be glad to find that it is on drama, and particularly on the plays of Shakespeare, that most time is spent; for, apart from Shakespeare's individual greatness, the instinct of the Indian student is particularly sensitive as regards drama. And in spite of the difficulty of Shakespeare's language, and its many non-modern characteristics, no rational person would deny that the study of him is the most vital part of English studies. But what of the scope and method of this study?

One may be permitted a little detail in the consideration of this matter. During our three-years' course, four plays are studied. These may or may not be plays of Shakespeare. At present three are Shakespeare's, and the fourth, also, is Elizabethan. Probably the proportion of Shakespeare plays would never be less than this. Three of the four plays are studied during the last two years, the *graduation* part of the course. Three plays in two years, and two or three hours spent upon them every week during these years. What an opportunity is afforded by these hundred hours or so—hours in which the definite task is set us of familiarising our men with English drama at its highest. But how do these hours pass? In what ways do we use them—by sheer compulsion so long as examination requirements remain just what they are? Many hours, certainly, are spent in actual interpretation—in showing wherein lies the power of tragedy, how subtly character is understood and how skilfully revealed, and what truth and tolerance there is in this infinitely varied presentation of human life. It is in such hours that the student does enjoy himself. He is getting what he wants and needs, what he will naturally and pleasantly remember, and what will really mean much to him amid the after-realities of life. His knowledge of life and of humanity is broadening, and his mind feels the ordering and elevating influence of poetry. But the great majority of "hours" are not like this. Slowly and painfully we go through the text. Every strange usage, every obsolete word, is carefully commented upon. Diligent notes are made, for these things have to be *remembered* to the bitterest detail. One reading is set against another, though the meaning be never in doubt; and the play halts and staggers while we discuss the interpretations of grave and philosophic editors. *Macbeth* is read, and the world of the witches is quite forgotten while we argue whether they speak singly or in chorus; or adorn the black-board with a lively picture of a "pent-house," sternly warning our hearers against imagining that it is derived from "house;" or show at length that "other" is really a more rational plural than "others." We have to do it. There is an annotation question in the examination, and the text must be *thoroughly* explored. Not one of these things will escape the student's grinding as the examination looms nearer. With a hundred details as to the obsolete and the irrelevant will he perforce encumber his mind, excluding worthier things. It is not without bitterness that he sometimes asks himself "What is the use of all this?" We may echo his question,—and taking "use" in no narrow sense. It would take a very bigoted philologist to state that we are thus producing culture. Of course in studies of this kind, *if they be followed far enough*, an element of culture emerges, to refresh the arid brain; but these students will never be led far enough. They have to start too far back. It is not, after all, their language.

Is it "scholarship" we aim at? Let us be assured that of our B.A. students (we speak of the mass, of course: they must be considered first) we shall never make "scholars" in the English language. A year or two ago they were in the entrance class at school, wrestling with the most elementary facts of grammar and idiom—and spelling; and their struggle is by no means victoriously ended. The petrifying first-process towards scholarship is eminently possible, but that is all. As for practical uses—it is obvious that facility and accuracy in the use of English are far from being furthered by the process we have described. The whole thing is definitely a waste of time, and a waste of the energy that is ready for our wiser use. So also with many matters that are not linguistic. Such matters as the date-problem and the "treatment of sources" have to be studied, and the process-fixed in memory. This is not nearly so bad. Both these studies are illuminating, besides having an excellent disciplinary element. For the student who can read and study widely they are of a very high value; and for the student, as here, who cannot they are by no means valueless. But let us remember that our own students, the great bulk of them, have read no Shakespeare plays, or practically none, save those prescribed and thus painfully pored over. The rest of his work (to think of his alone) is a sealed book. Can there be any but one answer to this question—is it wiser to widen the field, to deepen the understanding of the whole mind and art of the dramatist, or to concentrate upon the detail and the production of a small fragment of that work? To get to know Shakespeare is the aim, and no-one knows Shakespeare who has not read him widely. It is all very well to say,—“Concentrate upon some instance of his working, and observe him closely there: that is the best beginning.” This would provide no justification for philological study of the play but might be used to vindicate such things as the close study of “treatment of sources.” But as to this study, a hint or two will be enough, and that for guidance and not for examination grinding. It is the people, the life, the planning, of the plays that matters most. “The play’s the thing”—and, whatever the interest of the play in *process* of shaping, the play as shaped is the manifestation of its author. One wants to see what his mind has fashioned in as many different spheres of thought and life as possible. This is the study of Shakespeare. We hear it said, “The thing must be done thoroughly if it is worth while to do it at all.” But this satiric platitude begs the question of *what* is to be done; and to miss the wood for the trees is fatal thoroughness.

The uttermost detail of study is often urged by the argument that the great failing of the students with whom we have to deal is a tendency towards vagueness and an extreme aversion from definite thought; that, therefore, the work to be set them must be of the

THE BENARES HINDU UNIVERSITY

No apology need be offered for the appearance in this Magazine of an article on the present crisis in the affairs of the Benares Hindu University. All universities come within our purview, and there is a peculiar fitness in this Magazine referring to the Benares University, inasmuch as His Highness the Maharaja of Mysore is the Chancellor of that institution. The Mysore University, of which His Highness is also Chancellor, is suffering from none of the striking defects which attach to the Benares University; for it is under the executive of a full-time Vice-Chancellor; it is supplied with funds and is overlooked by the State, and is under the immediate guardianship of His Highness. In all these important respects Benares differs from Mysore; but none the less its concerns are as much those of His Highness the Chancellor as are those of the Mysore University. Moreover, the University of Mysore, like that of Benares, is a new foundation and in its ideals has much in common with its sister of the North. Naturally she follows with more than ordinary interest the fortunes of the Benares University. It is therefore appropriate that an article dealing with the critical position at the Benares University should find a place in this Magazine; and this is the more necessary because the position at Benares has been to some extent misrepresented and largely misunderstood. An impartial statement may do something to remove unfounded apprehensions, and, by clearing the atmosphere, may place the issues at stake plainly before the public.

We have before us the addresses delivered last January at the Convocation of the Benares Hindu University by His Highness the Maharaja of Mysore, Chancellor, and Sir P. S. Sivasawmy Iyer, the Vice-Chancellor. In those addresses not a discordant note is struck, not the faintest indication is suggested that all was not well at the Benares University. In view of what has happened within a few months of their utterance, the following words of His Highness the Chancellor are worth noting. "The history of the Benares University illustrates the unwearying courage of the leaders of the movement, their capacity for sustained effort, their co-operation and their powers of organisation." With what pained surprise, then, must His Highness have heard of the disruption which has since taken place!

And it was in the same Convocation address that the Chancellor publicly proclaimed his pride in being associated with the University and its workers. "I esteem it a high privilege to preside at the first Convocation of this University in the presence of such a distinguished gathering. Although the distance of Benares from my own territories does not permit my visiting the University as often as I could wish, or associating myself very closely with its affairs, yet, believe me, I shall always take the deepest interest in its welfare and shall recall with gratification the great honour which the University authorities have paid to me in selecting me as their first Chancellor."

There can be no doubt that the state of things which has arisen at the Benares Hindu University is much to be deplored. It has not only embittered relations in the University and fostered chaos and inefficiency; it has also roused feelings akin to despair among those who confidently hoped that this, the first Hindu University outside the Native States, would afford an encouraging object lesson in administrative efficiency and cultural development. Alas, for such hopes! The University started with high aspirations and ideals. It was to be an All-Indian institution; it was to discharge, by fostering research, the important function of extending knowledge, not merely imparting it; it was to institute technical courses as bases for the industrial development of the country; it was to institute a thoroughly efficient Teacher's College; and what is best in the culture of the East and West was to find in Benares a happy meeting ground. In short, as a first-class University, it was to do much which was not done by the other Indian universities, to which it was to become an exemplar and guide. But, so far from realising these ideals, the Benares Hindu University is bidding fair to become a striking example of what the Indian universities should studiously avoid.

In making known the internal situation of the University, there has been too much washing of dirty linen in public, and the real issue has been obscured by a lamentable display of partisanship and the grossest abuse of individuals. Originally confined to the executive and the staff of the University, the dissension has spread to the students, and two factions, each composed of members of the staff and the students, wage battle royal over the merits or demerits of certain heads and professors.

Our contemporary *The Indian Social Reformer* says that the source of the trouble is the introduction of the element of Denominationalism—the rock on which so many good causes have been shipwrecked. No doubt this has been a disturbing element. Apparently, the teachers of religious instruction are Pandits innocent of English, of modern methods of study, and of the great advance which modern thought and science have made. They teach with an *ex cathedra* air, and that to students who know something of modern

knowledge. We know from experience that the entrusting of religious instruction to pandits, whose erudition is strictly confined to the sacred texts, is bound to be a failure. Nor is this all. We understand that at Benares the teaching of the most sacred books is confined to caste students; and other students are regarded as outcastes.

But disturbing as is this element of compulsory religious instruction, we venture to think that it is not the main cause for the trouble at the Benares Hindu University. The root of the trouble is a question of efficiency. No one will doubt the disinterested motives and lofty patriotism of the present Pro-Chancellor and acting Vice-Chancellor, the Pandit Malaviya, and of Sir Sivaswamy Iyer who has recently retired in despair from the Vice-Chancellorship of the University. Both have the interests of that University at heart, but they fundamentally differ on the question of the means to be adopted to secure those interests. Sir Sivaswamy Iyer went to Benares with the reputation of having been a successful Vice-Chancellor of the University of Madras. But it must be remembered that the experience of a Vice-Chancellor in the Madras University, which is largely an examining body and has no executive control over the constituent colleges, is not likely to prove a useful experience in an institution like the Benares University where the conditions are entirely different. Sir Sivaswamy Iyer, having given of his best, a very good best, in the time at his disposal, no longer has a controlling hand in the affairs of the University, and the burden of the responsibilities of putting those affairs on a satisfactory basis lies for the present mainly on the shoulders of the Pandit Malaviya. Even in ordinary times, the administration of a young university like Benares would be a strain on the energy and enthusiasm of a single individual. The times however, are extraordinary, and the Pandit will need all available support if he is successfully to carry the University through the present crisis. But, unfortunately, the claims of the University on the Pandit are not confined to the administration. As everyone knows, he is the financial mainstay of an institution which depends largely on private subscriptions. He is entirely responsible for the 67 lakhs already collected, and many more lakhs will have to be brought in if the promised developments, indispensable as a source of attracting funds, are to be carried out. The double burden thus thrown on one pair of shoulders is unnaturally heavy, and we may say that it will be impossible for the Pandit himself to carry out his self-imposed task of seeing the Benares University through the present crisis. The fact is that the work of a teaching university like that of Benares, especially at the initial stage when appointments have to be made and new courses introduced, requires the continued presence of a full-time and

therefore full-paid Vice-Chancellor. All his time and energy should be devoted to the work of organisation and of coming into intimate contact with the staff. His work is never ending or never should be, and it is not only unreasonable but also economically unsound to allow such work to devolve on an unpaid honorary official. From such an official we have no right to expect as much time and energy to be devoted to the work as we should have a right to expect from a full-time Vice-Chancellor. And necessarily when we speak of a full-time Vice-Chancellor, we mean a residential officer. That is absolutely essential; but it was condition altogether unobserved by the two previous honorary Vice-Chancellors who lived at impossible distances from headquarters. Such an officer should always be, as it were, on the spot, available at all reasonable hours throughout the term. We believe that had Benares been blessed with a capable, full-time and residential Vice-Chancellor from the first, the present troubles would never have seen the light of day. It should be an essential condition in those new teaching universities which are being created in India that they should have full-time and amply paid Vice-Chancellors. Unfortunately, in India we have had no experience of universities directly governing the constituent colleges and hostels, appointing the staff and directly managing a number of university institutions. In the Indian university, the Vice-Chancellor is an honorary official with nearly nominal duties, except the arduous one of presiding over the Senate meetings. The officer is nominated by Government, and is a high official probably with no practical knowledge of the working of the university. But now that something like *bonâ-fide* universities are being started which are altogether foreign to Indian experience, the need for a full-time and amply remunerated executive officer is not appreciated as it should be. In Benares there is more than enough for such an officer to do, and the appointment of a full-time and residential Vice-Chancellor is the first reform which should be taken up. We believe the appointment will be a most important step in bringing about a better state of things in the University. Unfortunately at Benares, the Vice-Chancellor is an elected officer, and this no doubt militates against his being a paid official. An elective post bearing ample remuneration will doubtless be a source of intrigue and disturbance at election time, if not at all times. It will probably be found necessary, should it be decided that the next Vice-Chancellor of the Benarese University is to be a full-time official, to change the Ordinances and make the appointment one of nomination under proper safeguards.

At present, the Pandit Malavaiya is acting as Vice-Chancellor until the question of a successor to Sir P. S. Sivaswamy Iyer is settled—in the way we have indicated, we hope. His presence at headquarters is already having a beneficial effect, as was to be

expected from a man of such magnetic influence. But this can only be a temporary arrangement at the best, for the Pandit Malavaiya has interests and engagements which make him ubiquitous; while his temperament is such that he would find it irksome to settle down to, for him, the comparatively humdrum-life of a residential Vice-Chancellor. Be this as it may, the Benares University has need of him at places other than at headquarters. Funds are wanted, and no one can collect them like the Pandit. If the University is to be transferred to the new site early next year, some lakhs must be forthcoming for the purpose. So far the requirements of the Arts subjects have received almost undivided attention. There is a demand for technological teaching, and if the mechanical and electrical engineering departments are to be immediately developed, as they should be, an outlay of seven or eight lakhs in the next three or four years, and a recurring expenditure of one and a quarter lakhs, seems necessary. It will cost ten lakhs to establish a college and a farm of agriculture, and a recurring charge of one lakh for their maintenance. The Teachers' College, of which so much was expected, must have much expended on it for equipment and material if it is to do any good at all. It is evident, then, that funds are badly wanted for many purposes consistent with the aims and ambitions of the University; and the Pandit Malavaiya must come to the financial rescue of the University, and be truly and really content to leave the administration at headquarters in other hands.

The very serious question of filling up the appointments suddenly vacated by four or five professors, and the still more serious question of reorganising the present staff and making the necessary readjustments should be immediately taken in hand by a small committee appointed for the purpose. It was on this question of the staff that Sir P. S. Sivaswamy Iyer and the Pandit Malavaiya were diametrically opposed, the former gentleman believing that some very drastic changes were necessary. There is a lack of simplicity, too, in the administration which needs attention. Executive powers and patronage are placed in different hands and in different degrees to an extent which cannot but cause friction. We think also that there should be a limit to the expectations which may be reasonably counted on from voluntary or honorary workers. The promoters of the Benares University attach undue importance, perhaps, to the voluntary principle, and as regards the Vice-Chancellorship, we believe they are fundamentally wrong in stipulating for an honorary officer. There are other honorary workers in the University, some of them having nobly sacrificed lucrative appointments to undertake equally arduous but less remunerated work at Benares. We have seen it stated that the lot of these honorary workers is scarcely a happy one. Instead of winning the

respect of their better-paid colleagues and of the higher authorities, they are treated with neglect and disdain. Whether there is any real or alleged inferiority in the work of these quasi-honorary workers which would account for such treatment, we cannot say. But it is an admitted drawback to the voluntary principle that the foibles of the workers must be tolerated—we must not look a gift-horse in the mouth. There are exceptions we know, and speaking generally the workers at Fergusson College, Poona, from the talented principal down, are such an exception. Were India dotted over with Fergusson Colleges, how many of our educational troubles would disappear, and how near we should be to realising a heaven on earth! But the average human being is not built that way, nor, as things stand, have we a right to expect that he should be so constituted. Moreover, Fergusson College is not Benares University, and what is achieved in a single college worked by a band of residential enthusiasts, is not as a matter of course to be achieved in an institution of the proportions of the Benares University. It is certain that the authorities at Benares are relying overmuch on the voluntary principle in the working of the University in which at any cost, efficiency must be demanded.

We believe we have now indicated the main points at issue at the Benares University, and the causes and remedies for the same. What the University most wants are efficient administration and abundant funds. But efficiency is absolutely essential; developments can wait. But the necessary funds are more likely to be forthcoming if an end is put to a state of things which would never have arisen had a properly constituted authority been on the spot from the first. There has been a good deal of anonymous, exaggerated, even violent writing on the subject, but matters are not quite so bad as some would have us believe. We have tried to present the case accurately and impartially, and have had no motive but the very sincere one of wanting to see the reputation of the Benares University re-established, and the means forthcoming for those developments to which the University is pledged.

THE EDITOR.

A POLITICAL THINKER OF THE 17TH CENTURY

Oceana the political romance, in which Harrington, whom Maitland does not hesitate to call one of the greatest of the great Common-Wealthsmen, gives expression to his political ideas, is not as well known as it deserves to be. This is perhaps partly due to the fact that Utopias are not very popular with practical people; in fact a contemporary went the length of calling the "*Oceana*" an airy, empty and imaginary Utopia, the fanatic's land of forgetfulness. It is also partly due the fact that the name of Harrington is not associated, like the names of Hobbes, Locke and Rousseau, with the celebrated doctrine of natural right which has been one of the moving forces in the reconstruction of the modern world. And yet, alike in the originality of its ideas and its subsequent influence, the *Oceana* is a remarkable book. It has justly been said that as Sir Thomas More was to Machiavelli in the sixteenth century, Harrington is to Hobbes in the seventeenth century (Bonar). Hobbes identifies reason with the interest of the individual. Harrington, who was as familiar with Grotius as he was with Machiavelli, identifies right reason with the interest of mankind and sketches for us an impressive political ideal, which has commanded the admiration of competent thinkers. Hume, the last person given to extravagant praise, though he takes occasion to criticize some of the proposals embodied in the *Oceana*, calls it the only valuable model of a commonwealth that has yet been offered to the public. Maitland declares that even remembering Plato's great work, there is much truth in this praise.

The capital merit of Harrington's work lies in the fact that in it he expressly repudiates the *a priori* reasoning that was fashionable in his time and adopts the historical method, a procedure which naturally invited criticism. Hobbes takes leave to doubt the wisdom of following the classical historians, who "derived their rights not from principles of nature, but transcribe them into their books out of the practice of their own commonwealths, as grammarians describe the rules of languages out of poets." Another contemporary writer points out that "it is the foundation of government upon undeniable principles and the deductions from them which render politics a complete science, without which the greatest conversation in particular commonwealths can but at most make men empiricals at policy."

Harrington, however, was convinced of the importance of consulting history before undertaking to deal with politics. "No man," he says, "can be a politician, except he first a historian and a traveller." Consistently with this principle he spared no pains to make himself familiar with the best historical knowledge that was then within his reach. Further, with a view to obtain a working acquaintance with contemporary politics, he visited the Netherlands, Denmark, and France, making careful notes of their political and social institutions. From France he went to Italy and spent some time in Venice, the constitution of which made a profound impression on him. "In the Netherlands he had seen what a people can do. In Venice he was shown what institutions can achieve." Lastly, he studied with special care the works of the previous thinkers like Bacon, Grotius and Machiavelli, for the last of whom his admiration was unbounded.

Thus equipped, he entered on the task of framing a commonwealth for his nation. At the very outset he enunciates one of the most far-reaching principles in politics, *viz.*, that the permanence of a state will not be secure unless there is a certain harmony between the structure of society and the form of government. (Firth, *Last Years of the Protectorate*.) According to Harrington the nature of government is determined by the distribution of its landed property. "Men are hung upon riches of necessity; and by the teeth for as much as he who wants bread is his servant that will feed him. If a man thus feeds a whole people, they are under his empire." If one man was sole landlord of a country, you had absolute monarchy as the result. If the greater part of land was in the possession of a few, you had a mixed monarchy. If it was so divided among the people, that no one man or number of men could overbalance them; then you had a commonwealth. Where there is the proper balance, it is no man's interest to overthrow the government, and where there is a popular constitution, there is no element of decay in the government itself. Accordingly one of the fundamental laws of Oceana is that no one shall be permitted to hold property in land more than what will yield £2,000 a year. Primogeniture is abolished and when a man dies, his estates are divided equally among his children. Harrington recognizes that money and moveables have great influence and, as in the case of Genoa and Holland may even overbalance the influence of property in land, but he holds that they are less stable. "They lightly come and lightly go." Harrington lived before the era of the Industrial Revolution. He could not therefore be expected to apply his principle to the industrial form of the community. It is, however not difficult to see that the principle is of wider application. His main position is, however, sound enough. "Harrington" says a young writer who willingly gave his life for his country in the

recent war, "was one of the first writers to give to economic considerations the prominence that they deserve and to bring them into connection with the science of politics. The long duration of the sovereignty of the big landowners no less than the modern socialist propaganda for the nationalization of the land bears eloquent testimony to the soundness of his actual thesis." (Russell Smith.)

Hume says that political writers have established it as a maxim that in contriving any system of government and fixing the several checks and controls of the constitution, every man ought to be supposed to be a *knave* and to have no other end in all his actions than private interest. Harrington at any rate does not go so far as that. He undoubtedly believes in the goodness of the people. "Whereas the people taken apart are but so many private interests, but if you take them together, they are the public interest." But he has not much faith in their wisdom. In his commonwealth, therefore, he provides for three orders, a senate to propose laws, an assembly to pass these laws and an elected executive, which term includes the judiciary, to carry them out.

His preference for a double chamber, Harrington justifies in four aphorisms.

1. "The reason of the senate is, that a popular assembly rightly constituted is not capable of any prudent debate."

2. "The reason of the popular assembly is that a senate rightly constituted for debate, must consist of so few and eminent persons, that if they have the result too they will not resolve according to the interest of the people, but according to the interest of themselves."

3. "A popular assembly without a senate cannot be wise."

4. "A Senate without a popular assembly will not be honest."

Parliament accordingly will consist of a senate of 300 members, who will represent the wisdom of the community, and an assembly of 1,050 members who will represent the interest and good sense of the community. One third of the members is to retire automatically each year so that parliament would always have some members of two years standing, some of one year, and some perfectly new. It would therefore resemble an orange tree, having at once "blossoms, fruits half-ripe and others dropping off in full maturity." Harrington next proceeds to set out the qualifications for both the electors and the candidates. He has not much sympathy with moral qualifications which only furnish an incentive to hypocrisy. The qualifications for electors merely relate to age and sex, but those imposed on candidates are more stringent. A candidate for the senate must be a married man of thirty years of age, have undergone military training and should own lands, goods or money of the value £100. Further, he should be approved by his parish, chosen by a committee selected by lot to

make nominations, and elected by a clear majority of the deputies from all the parishes in his district. In the case of the assembly, the property qualification applied only to $\frac{2}{3}$ ths of the total number, thus making it possible for comparatively poor men also to enter it. Lastly, in order to mitigate the disorder and corrupt practices incidental to parliamentary elections, Harrington introduces the ballot and indirect election. "The purity of the suffrage in a popular government is the health, if not the life of it, and the election or suffrage of the people is most free, where it is made or given in such a manner that it can neither oblige nor disoblige another, nor through fear of an enemy, or bashfulness towards a friend, impair a man's liberty."

In common with the other great thinkers of the commonwealth, Harrington is an unflinching, though an inconsistent, advocate of religious toleration, for he excludes from the operation of this principle, on political grounds the Jews, Roman Catholics and Idolators. With unanswerable reasoning, he points out the close connection between democracy and toleration. "Democracy being nothing but entire liberty, and liberty of conscience without civil liberty or civil liberty without liberty of conscience being but liberty by halves, must admit of liberty of conscience, both as to the perfection of its present being, and as to its future security." He believed that there is a national conscience to which also liberty is due. "A commonwealth is nothing else but the national conscience. And if the conviction of a man's private conscience produces his private religion, the conviction of the national conscience must produce a national religion." Harrington retains accordingly the idea of a State Church, but he keeps clear of doctrine and makes no attempt to supply it with a creed.

Harrington is in nothing more in advance of his time than in his insistence on the necessity of free compulsory education under government control, "The Education of a man's own children is not wholly to be committed or trusted to himself." In one respect he is in advance of our own time for he does not neglect the political education of the people. A prominent feature of the *Oceana* is the "Tuesday lectures or orations to the people," in which the mysteries of the ballot indirect election and other subjects of a like nature are to be explained to the people by competent government officers. And the *Oceana* also provides for an institution called the Academy which gives political instruction to the people in informal meetings held every evening and at the same time gives the Government an opportunity of keeping in touch with the country and helping to form public opinion.

That Hume occupies a conspicuous place in the history of philosophic thought is well known. It is not, perhaps, equally well

known that he is one of the earliest writers that used history and psychology as the basis for political science. Hume was too great a man to stand in need of borrowing either his ideas or method from any other writer. Whatever he wrote, he illuminated. (Maitland.) It cannot, however, be denied that Harrington exercised considerable influence on him. In his short essays on politics he makes frequent allusions to Harrington and while sympathizing generally with his theories he points out the necessary qualifications to which they are subject; in particular, he explains that respect for property is not the only basis of government and that it rests on two other foundations, *viz.*, custom and interest.

Another great writer who came under the spell of Harrington is Coleridge, who ranks him with Thucydides, Tacitus, Machiavelli and Bacon, as one of the "red letter names even in the almanac of worldly wisdom." According to Coleridge, the interests of permanence and progress in a State are represented by real property and personality. It is not difficult to see in this the reflection of the thought of Harrington. The following lines from Wordsworth show that the poet too felt the fascination of Harrington's writings.

"Great Men have been among us, hands that penned
And tongues that uttered wisdom-better none!
The later Sidney Marvell, Harrington,
Young Vane, and others who called Milton friend."

It is not, however, on individual thinkers alone that Harrington left his mark. Some of his ideas made their way into the domain of practical politics in England. In 1835, the system of rotation was adopted for local government. In 1872, the ballot was passed and its introduction was mainly due to the persistent advocacy of George Grote, the historian of Greece. It is a noteworthy fact that he was a diligent student of *Oceana* and it is said that in the manuscript department of the British Museum there is an unpublished critical essay by Grote on *Oceana* evidencing a very careful study of the book. Lastly the scheme of rotation finds a place in the proposals framed by Lord Lansdowne in 1912 for the reform of House of Lords.

It is, however, in America that the *Oceana* left the deepest mark on political thought and action. The framers of the earlier constitution of Carolina, New Jersey, and Pennsylvania were inspired with its ideas and though these constitutions ended in failures, their influence remained. Its liberal principles, especially the idea that government must be based on the consent of the people, exercised profound influence both on conservative statesmen like John Adams, and revolutionaries like James Otis. Above all, the remarkable prophecy contained in it that the States were destined to become independent, "they are yet babes that cannot

live without sucking the breasts of their mother cities, but such as I mistake if when these come of age, they do not wean themselves, which causes me to wonder at princes that delight to be exhausted in that way," kindled a warm sympathy in the people and it became usual for writers and speakers to wind up their performances with references to Sidney, Milton and Harrington. In one of the articles which John Adams wrote for the *Boston Gazette*, he goes on to speak of the equality of man, the sovereignty of the people, their delegation of power to the king, and breaks out as follows: "These are what are called revolution principles. They are the principles of Aristotle and Plato, of Livy and Cicero, and Sydney, Harrington and Locke, the principles of nature and eternal reason; the principles of which the whole government over us now stands." In the funeral address delivered over the body of General Warren, which was long famous in America the orator eulogizes his hero in the following significant words. "Like Harrington he wrote—Like Cicero he spoke—Like Hampden he lived—and like Wolfe he died." Thus Harrington's *Oceana* co-operated with the writings of Sidney, Milton and Locke in creating an intellectual atmosphere favourable to the revolution. It is a matter of common knowledge that the Constitution of the United States adopted the main ideas of *Oceana*, such as the separation between the executive and legislative functions, the ballot, rotation, indirect election, the residential qualification.

Harrington's *Oceana* was not without influence even in France. It supplied Abbe Sieyes, in the opinion of Lord Acton, the most original of the revolutionary statesmen, with many of his ideas. The re-division of the country into uniform departments was borrowed from the *Oceana* and there is reason to think that he took hints from the same source in framing proposals for the great dumb legislative assembly which was to merely pass judgment on bills presented to it and for the constitutional jury which was to keep watch over the constitution. Thus a recent historian is fully justified in saying that Harrington's name arrests us in the three great revolutions of the modern World (Gooch).

N. NARASIMHA MOORTHY.

NATIONAL, IMPERIAL, AND INTERNATIONAL EDUCATION

THE Great War which has now come to a definite close has given a remarkable impetus to the tendency towards imperial and international unity, an impetus which is being accelerated by the almost miraculous development which is taking place in means of communication. Day by day, the world is getting appreciably smaller, and the time is not far off when the greatest distances will be measured in days, not months, and man will be brought nearer to man in a way which would have been thought incredible only a few years ago. Idealists fondly believe, and we all hope, that these increased facilities for acquiring intimate knowledge of different peoples will banish misunderstandings and bring about harmony and peace. That the countries of Europe, with distance for them practically annihilated, have not so far succeeded in living in brotherly union, need not unduly distress us. A militarist education has predominated in which the principles of humanity have been disregarded. This the greater part of the world now recognises, and there is hope that with time such a system of education will be discarded even by its most ardent promoters.

However, it is our duty to seize the present opportunity to forward by every means in our power the movement towards imperial and international unity. Already we have the political League of Nations, an International League of Labour, and indications of industrial and commercial rapprochement. Efforts are now being made for a League of Education, and rightly too, for it is only on the foundation of a League of Education, based on humanistic principles, that we can hope to build up a solid structure of internationalism in all its phases. Is such a scheme feasible? At present it is only an idea to a great extent, and talk and writing will have to give way to deeds if the League of Education is to take definite shape. Still, in England we can see the beginnings of the different stages which have to be developed before the international idea is realised. The Education Bill has given England for the first time a truly national scheme of education—a very necessary preparatory step towards imperial and international unity. The educational ladder has now a regular succession of

steps from the bottom to the top. Then there are those various national educational associations to which we have so often alluded in this Magazine, of which the National Union of Teachers has a membership of over 100,000. Imperially, too, the bonds of education are drawing closer. Already since the War there has been a large influx of students from the different parts of the Empire, and more will be attracted as the English universities develop their post-graduate and research courses. A system of the imperial exchange of professors and teachers is being fostered, and both between universities in England and between them and the Dominion and Indian universities, the migration of students, for purposes of specialised study, is being encouraged. In this imperial stage there is a Bureau for Universities within the British Empire, in connection with which a Conference was held in London three or four years ago, in which, we believe, every university within the Empire was represented. Lastly, one of the most hopeful factors in this imperial stage, is the system of the education of soldiers, a system which temporarily introduced during the War, is now to become permanent. At one time during the War, the incredible number of 3,000,000 British and Dominion soldiers were under instruction, in many cases of a university standard. Demobilisation has considerably reduced this enormous figure, but arrangements are being made to carry on the education of many of the demobilised men with a view to fitting them for civil life, and as many as 4,000 Dominion men, assisted by scholarships granted by their governments, have been accommodated in British universities and other educational institutions. Of the men still under arms about half a million are under education in France alone, while educational facilities are afforded for men under arms in Germany, Salonika, Egypt, Mesopotamia and other places. The newly formed Imperial Education Committee has already done much good work by facilitating educational arrangements with the Dominions. The question of the interchangeability of credit for work done by students transferred from one university to another within the Empire is receiving attention. The warmest advocates of imperial education would allow a transferred student to take his degree "in the same period of time as if he had remained at his own university." This will probably become possible at the Scottish universities and in the newer English universities. But Oxford and Cambridge insist, probably rightly, on at least two years residence, in order that the transferred student should imbibe something of the social life which is the chief characteristic of those residential universities. But there is a growing feeling that it is not so much the exchange of undergraduates which should be encouraged as that of post-graduates. The matter of giving credit for past work

would then give no trouble, while the universities would be encouraged to devote themselves largely to special branches of research or post-graduate study.

From the national and imperial stages of education it is but a step to international education. The British Empire should naturally become the pioneer in international education, for that Empire is in itself a veritable League of Nations. Already in that Empire there are indications of the possibility of an International League of Education. The Rhodes Scholarships have for years past maintained a number of American students at Oxford, and this year as many as 2,000 demobilised U.S.A. soldiers have found accommodation in thirty-six British universities and technical schools. Mr. Balfour showed that he appreciated the international importance of this educational element when he said that Anglo-American relations were being based on something better than mere sentimentalism, a blood-thicker-than-water idea. They were being based on the solid rock of community of ideals. A large number of Russian students are pursuing their education in England, and a Bureau of Information has been set up for their benefit. Many Serbians and Belgians are likewise to be found in English universities, in which also other European countries are represented. The exchange of both professors and students between England and foreign countries is being encouraged. Such reciprocity has long been practised between American universities like Harvard, Princeton and Yale and the older universities of England, and it is hoped to bring the universities of the Western and Middle States into similar relations with British universities. Another means to international unity in education is the Modern Language Research Association, which from its headquarters at London offers membership, sympathy and guidance to practically every country in the world. Research work in modern languages has developed rapidly in most countries, and the Association will do much to encourage and regularise the work. Not less remarkable is the establishment of professorships and courses in modern languages which has taken place within the last year or two at the English universities, including the older universities of Oxford and Cambridge. This is one of the most hopeful means towards international unity. Insularity and misunderstandings cannot but disappear, as frost before the sun, when such steps are taken to get at the inner thoughts of peoples. It is but fitting that the University of London should lead the way in this new development, for London is the political and commercial capital of the British Empire. She bids fair to become the headquarters of the International League of Education. More than fifty distinct languages are taught in the affiliated colleges of the University of London by a crowd of professors, readers and lecturers, and in other

respects also, the University is rapidly developing into an institution worthy of the seat of the Empire and of the headquarters of the commercial world. So far then as England and the British Empire are concerned, there are abundant and hopeful signs that a League of Education is not an unattainable ideal. The tendencies towards that ideal are national, imperial, and international. In each phase, efforts have to be stimulated, developed and systematised, and the guiding principle throughout, to be inculcated in season and out, must be the ethical principle of love for humanity, love for the individual, respect for life and all that makes life worth living. If ever there is to be a real comity of nations, it will by the means of a humanistic education that the ideal will be realised. That there is sure evidence of the recognition of such agency is the most hopeful sign amidst the suffering and turmoil of to-day.

What place is India to have in this scheme of international education? If education is to be the basis of political development, then how much educational ground has India to cover before she can reach the goal of her ambition? But ten per cent. of her people are literates. No solidarity of interests attaches to her teachers as a body. Where is the Teachers' Association which can really claim to represent the teachers of a single province, much less of all-India? Most of our teachers are underpaid, and lack the spirit and ambition to qualify themselves professionally, and to unite as a body to further their interests. Others, having appointments with fairly good prospects assured to them in Government service, selfishly or timidly stand aloof from associations which they believe can have little interest for such as they. Each Province should have its register of teachers, its representative association, its literary organ and its annual conference. When we pass the bounds of the Province, matters are still worse; for few indeed are the educational ties which unite the different Provinces, and far off is the prospect of an All-Indian education. Our universities, which should be in friendly intercourse with each other, are jealously Province-bound. Instead of encouraging reciprocity in the exchange of students and the temporary interchange of professors, they guard their institutions as though they were citadels to be defended from the invader. Distrust in the standards of Indian universities is the alleged and sometimes justifiable cause for this attitude. We are not supposed to know the contents of the Report of the Calcutta University Commission, but many things leak out, and among these is a proposal for the remedy of this exclusiveness. It is that the Government of India, not the Provincial Governments as heretofore, should make the necessary grants for the universities, and legislate for them with a view to raising and keeping uniform the standard of the different universities. There is much to be said against the centrali-

sation of a country with such diverse conditions as those of India. But this maintenance of a uniform educational standard has so much in its favour that we close our eyes to the possible risk of undue centralisation. Then may we hope to see the wall of partition which divides the universities thrown down, and as the result of an all-Indian standard, the encouragement of reciprocity, of specialisation, post-graduate study and research. Then will India present a united educational front to the world, and will be better fitted to take her proper place in the imperial system and in that educational league of nations which is the aspiration of the friends of humanity. As it is, there is far more reciprocity between the Indian universities and those of England and the United States than there is between the Indian universities themselves. This reciprocity is developing, and with the wider, more generous views brought about by the Great War, a warmer hand of friendship will be held out to the Indian student. Are we too sanguine if we look forward to the time when students of other countries, especially Australia, will come to India for post-graduate or research study in certain subjects best studied under the physical and climatic conditions of this country? In the ways which we have indicated, and in the Minister and the Commissioner for Education for the Government of India, and in the Bureau of Education, we have the faint beginnings of educational unity, Indian and imperial. But the almost miraculous advance in the interest recently shown by the people of this country in education leads one to believe that that entity will be realised much sooner than would have been thought possible a few years ago.

The Great War was a tragedy the like of which the world had never seen, and which, God helping, it shall never again see. But through all the horrors of the War, the spirit of humanity persisted and to-day is soaring above nations and empires, above broken treaties and stricken hearts. By education, what is noblest in man has to be brought out, developed and glorified, until the spirit of humanity pervades all men and makes of all men one kin. A League of Education is at present but an ideal, but it is an ideal to which we can all consciously strive. Both as peoples and individuals we can help towards its realisation, and unless we do so help, the sacrifices which the Great War involved will, so far as we are concerned, have been made in vain.

THOS. DENHAM.

HOYSALA ARCHITECTURE

HINDU temples built within the dominions of the Hoysalas are usually included under the general name of Chalukyan architecture. Chalukyan temples are found within the limits of the old Chalukyan empire, as far north as Mount Abu and in the south even below the banks of the Cauvery. No doubt there is some similarity in plan between those temples outside the Mysore territory and what may be called the Halebid-Belur-Somanathpur series, but the differences are greater than may appear to the casual observer. It may therefore be permissible to question whether it is right to group these latter temples together with the Chalukyan shrines. In a paper read before the Mythic Society and published in Volume VII, pages 43-58, these temples were described as belonging to the Chalukyan style (page 54); but this classification was challenged by the Editor in a foot-note and, it was suggested that this style should be more properly called the "Hoysala Style." The authorised annual reports of the Mysore Archæological Department for 1914-1915 adopt the name "Hoysala" in describing these temples in Mysore, and this adoption has been commented upon as follows:—"It is an act of great courage of conviction on the part of the officer (Rao Bahadur R. Narasimbachar, M.A., M.R.A.S.,) to share the view propounded for the first time and since persistently held by the Reverend A.M. Tabard, M.A., President of the Mythic Society, that, in spite of Fergusson and his airy mixing of styles, the Chalukyan architecture should more justly have been called Hoysala architecture." In that admirable monograph on "Somnathpur," and in the authorised reports of Government, Mr. R. Narasimbachar has been consistently referring to this style of architecture as "Hoysala." It is significant that two such high authorities as the President of the Mythic Society, and the Head of the Archæological Department in the Mysore State, should place their seal of approval on the proposed change of name given to the style.

The early impression that the Halebid temples which were built before 1025 A.D. were Saivite temples or Jain Bastis, has now been discredited by the authentic testimony of the inscriptions. Temples of this style in Mysore may roughly be grouped under two classes, the Halebid and the Somnathpur series. To the former class

belong (1) the Channakesava temple at Belur, (2) the Kirtinarayana temple at Talakad, (3) the Hoysalesvara Temple at Halebid, (4) the Gangadhareśvara Temple at Sivaganga and others, while the latter group comprise (1) the Kikkeri temple, (2) the Koravangala temple, (3) the Amritapura temple near Tarikere, (4) the Kedāreshwara temple at Halebid, (5) the Harihareshwara temple at Harihar, (6) the Harnahalli Temple, (7) the Nuggihalli Temple, (8) the Somanathapura temple and (9) the Turuvekere temple. Of course these are only a few of the numerous temples belonging to either group, and the Jain structures of this period are not mentioned, being of minor account from an architectural point of view. The oldest temple of this style, probably, is that of Parvathi at Kuppatur between Shikarpur and Sorab built about 1070 A.D., and it may be conjectured that the Kedārēśvara temple at Belgamī also belongs to the same period, being inferior in design and workmanship to the Halebid series of temples. They are followed by hundreds of others studded all over the country belonging to the 12th and 13th centuries. In the 14th century the only temple, built between 1336 and 1356, corresponding to some extent with the styles of these series of temples, is that of Vidyasankara at Sringeri. This last borrows the raised terrace, rows of animals, puranic scenes, large images and embankment in front of the towers, from the Halebid temple style of architecture. The Dravidian temple of Ikkeri in the Sagar taluq has projection in front of the towers, perforated windows and ornamental arches after the manner of the Hoysala temples. After the Hoysala rule came to an end no temple of this style was built. Even as regards the Chalukyana, building operations of this style commenced only after their acquisition of the Kongu country. Some structures built under the Eastern Chalukyans no doubt bear a faint resemblance to this style, but all these temples can only be compared with the earlier shrines of the Hoysala period and not with the later ones. Under Chalukyan domination, the earlier structures were Jain, and their latest at Kuruvatti belongs to 1189. Architecture was thus a most flourishing and developing art in the Hoysala country when it had decayed in the Chalukyan. The Chalukyan, like the Hoysala, began temple building at the capital, extending it later on to remoter parts of the empire. Mr. Rea, late of the Madras Archæological Department, evidently felt that some explanation was required if the temples in the Hoysala country were to be ascribed to the Chalukyan architecture, inasmuch as he wrote: "A variety of the Chalukyan style was carried on by the Hoysala." When it is conceded that the Hoysala style is a variety of the Chalukyan, it must be at the same time conceded that it is a variety which shows considerable advance in the design of the temples, in the continuity of architectural details, and in the marvellous excellence of its workmanship—to a degree indeed

that comparison between the two is to the detriment of the style that may properly be called Chalukyan. The finest temples of the hitherto called Chalukyan style belong to the Hoysāla country and the dynastic crest of Śāla and the tiger, seen in a prominent position in front of all the Hoysāla temples, shows that the Hoysāla king meant to make this style their own. In the Koravangala temple the crest is in front of the beautiful tower, and is the first object that attracts the attention of the visitor. The only ground upon which this singular style of architecture, which is practically confined to the Hoysāla country, might be called Chalukyan is that the Hoysālas were at first their feudatories; but this is hardly a reason for depriving the Hoysālas of a glory which they seem to claim by fixing their banner on their temples in a prominent position. Should not then posterity give their name to the style consistently with their greatness and with the grandeur and beauty of their temples, and erect a separate niche called "Hoysāla" in the fane of Indian Architecture?

S. SRIKANTAIYA.

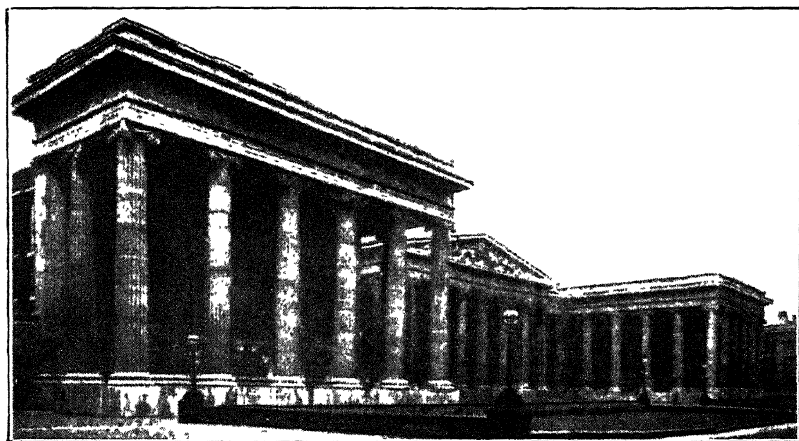
"I KNOW that there are some people who are sceptical as to the influence of education; they think it is a moderately good thing for the rich, and an immoderately bad thing for the poor. They believe that education is the source of unrest and discontent and they distrust any form of mental activity, except their own, in the exercise of which they display a scrupulous parsimony. Now for one person made discontented by fancy there are a thousand made discontented by fact, and for one person made discontented by knowledge there are ten thousand made discontented by ignorance. A man may be discontented for many sufficient reasons. He may have a scolding wife or an empty stomach or a bad digestion. He may be fatigued by over-work or insulted by his foreman, or put out of a job for no fault of his own; but he is not discontented because he knows the rule of three, has heard of the Habeas Corpus Act, or can repeat a sonnet of Wordsworth. He is not discontented because he is being made aware that nature has some secrets worth explaining, and that there is interest to be won from a visit to the local museum or picture gallery. Education does not breed discontent, but heals it."

(*The Right Hon. Mr. Fisher, Minister of Education.*)

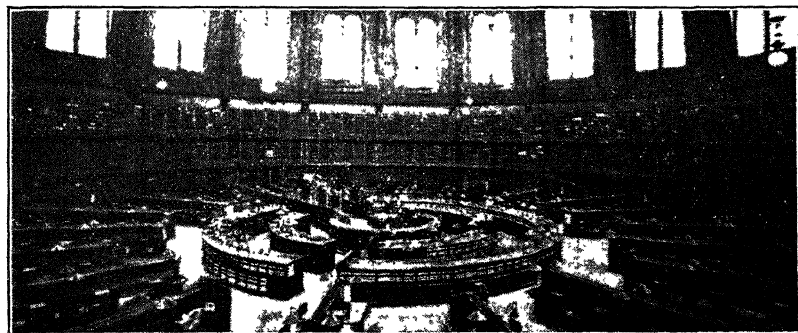
A NATIONAL OR STATE CENTRAL LIBRARY FOR MYSORE

A NATIONAL Library as distinguished from a Local or Municipal Library is obviously the central repository of the national literature of all kinds and a Bureau of international literary exchanges ; in short, it is a national monument showing the literary, scientific and industrial development of the nation both intrinsically and in relation to the rest of the civilised world. The service rendered to the world of letters and science by the careful preservation of a complete series of the national literary output and accessions by purchases and international exchanges from time to time, so as to be freely and easily accessible to every citizen for reference, research or recreative reading, cannot be overestimated, nor can the absence of such a national literary repository be excused in a modern progressive country. The same reasons that call for a national museum or art gallery will, with greater force, urge the need for a national library on a scale consistent with the dignity, resources and requirements of the nation. It is obvious that a local or municipal library designed to serve the needs and tastes of a particular locality or group of readers, cannot take the place of a central State Library which has to serve the whole nation, wherein one would find everything of value published at all times in the country, and as much of the outside world's literature as could be purchased with the resources of the State available for the purpose, having regard to local needs.

The history of the growth of important national libraries of the world shows that they have mostly grown out of royal collections of valuable State literature placed at the disposal of the public, gifts and bequests by patriotic citizens, compulsory acquisitions of locally published literature under the copyright law, international exchanges secured in return for local literature, and purchases made from time to time out of grants for the purpose from the State revenues. In making up the initial collection by purchase, prominence is naturally given to everything of value relating to the nation and to the urgent requirements of the country as a whole. With a view to encourage private benefactions for public purposes, and as a just measure of the nation's grateful recognition of such benefactions, special collections got by gift or bequest are maintained separately with statues, busts, paintings or other memorials of the respective



THE BRITISH MUSEUM



BRITISH MUSEUM LIBRARY—MAIN READING ROOM

The British Museum and Library, London.

donors. National libraries in certain cases, are very advantageously housed with national museums and art galleries. Such institutions have a legal status and constitution, and are preserved with the zealous care which such national monuments require.

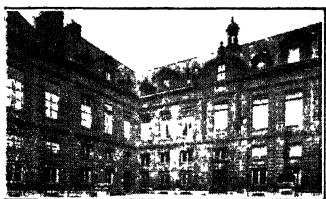
The most important of modern national or State libraries of the world are the British Museum Library, London; the Bibliothèque Nationale, Paris; the Royal Library at Berlin; the Library of Congress at Washington, U.S.A.; and the Imperial Library, Tokyo. The institutions in India which can bear comparison, only as miniatures, with these libraries are the Imperial Library at Calcutta and the Baroda State Central Library. The history of the national libraries named, outside India, is co-extensive with the history of the growth of the respective nations, and the majority of the institutions are as old as the national civilisations themselves.

The *British Museum Library* is the most important and valuable of the world's national libraries, for its collection is unique, comprising as it does the most ancient, scarce and invaluable manuscripts of several nations in and outside the Empire. Founded about 1753 as a result of the bequest by a citizen of his books and manuscripts "for the use of the nation," the library has been enriched enormously by the additions of the royal collections of George II and George III, acquisitions under the copyright law, and valuable purchases. Its present collection is reported to comprise nearly four million printed books and pamphlets, over 60,000 manuscripts, and a very large number of maps and plans. Its extensive reading hall or rotunda is provided with over 30,000 reference works which are freely available to readers without any formality. The *Bibliothèque Nationale*, Paris, is perhaps the oldest of modern national libraries, having been founded about 1363. It has an advantage over other national libraries in the length of the time during which its contents have steadily been growing, and in the great zeal shown for its development by successive kings and governments of France. Its present collection of printed books and pamphlets is said to number over $3\frac{1}{2}$ million volumes. The *Royal Library* at Berlin, founded about 1661 by the Elector Frederick William, is considered to be one of the most important national libraries in Europe. Its collection of printed books and pamphlets is reported to exceed two million volumes and the annual expenditure on books is said to be nearly £12,000. The unique feature of this library is that, unlike other national libraries, it is available for loans to any citizen and library in Germany. The *Library of Congress* at Washington is the national library of the United States of America, and is the third large national library in the world. It was twice destroyed by fire but rebuilt and re-equipped, and its present building, completed about 1897 at a cost of over six million dollars, covers an area of nearly

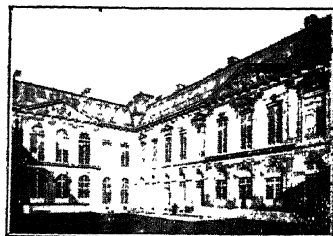
3½ acres on a site of ten acres. One principal source of the rapid growth of its collection is the copyright acquisitions, as in the case of other national libraries. Another provision of law by which the library has been enriched by a vast amount of international literature is that a large number of sets of the U.S. Government publications are placed at the disposal of the Library of Congress annually for foreign exchanges. Its present collection comprises about 2½ million volumes of printed books and periodicals, 150,000 maps and over 400,000 photographs and engravings. Its annual budget appropriation is over six lakhs of dollars. Besides being open for use by every citizen, the library is available for special loans to institutions in any country under the system of inter-library loans. The *Imperial Library of Japan* at Tokyo was founded about 1885, and has over 500,000 volumes at present.

Compared with the gigantic institutions described above, the national libraries of India are indeed very small collections of recent origin and growth. National libraries, in the shape of large royal collections of past and contemporary literature existed in India at almost every age of her long history, but there has not been, unfortunately, any scope for the growth of a central national repository of the collections. They were scattered as quickly as gathered with every changing stage of the country's political history, and the extant relics of the libraries are perhaps only of archæological interest, the valuable collections having found their way to private stores in the country or to institutions and book-collectors outside. The numerous temple and ecclesiastical archives are perhaps still invaluable, but they are to a large extent inaccessible to the public or, at any rate, are not organised as public libraries of reference. The important State libraries of recent origin and growth are the Imperial Library at Calcutta and the State Library at Baroda. The *Imperial Library*, Calcutta, was established by law in 1902 to be "a library of reference, a working place for students and a repository of material for the future historians of India, in which, so far as possible, every work written about India at any time can be seen." It is a free public reference and lending library. Its present collection is about 200,000 volumes and arrangements are reported to be in progress to provide it with a handsome, dignified and commodious building as early as possible. The *Baroda Central Library* had its origin in the palace library of H. H. the Gaekwar. Founded in 1910 as a public library, with a gift of the royal collection of over 20,000 volumes, it has now over three times as many books, with extensive children's and ladies' sections and a Sanskrit research department. It is both a state central reference library and a public lending library.

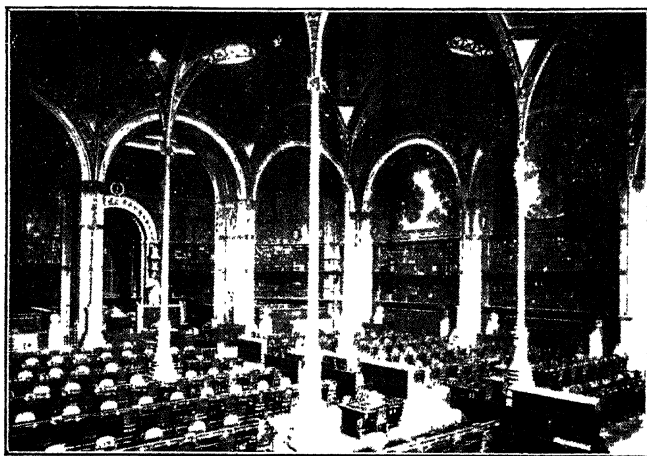
Considering what has been briefly stated above regarding notable national libraries of the world, it may not be extravagant or out of place



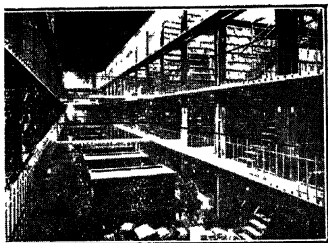
COURT OF ADMINISTRATION



COURT OF HONOUR



MAIN READING ROOM



BOOK STACKS



MANUSCRIPT DEPARTMENT

Bibliothèque Nationale, Paris.

to suggest for the kind consideration of the Government of H. H. the Maharaja of Mysore, the urgent necessity and desirability of establishing a properly constituted State Central Library with copyright privileges and provisions for a reasonably quick growth, having regard to the dignity, reputation and resources of the State, and to modern requirements of reference, research, and public enlightenment. Such a library cannot better be founded than with a gracious gift of valuable State records that can be made available for public reference and study, important royal portraits, paintings and other memorials of the State. The library would perhaps be best housed in the Seshadri Iyer Memorial Hall, Bangalore, which is centrally situated for the State Public Offices and is associated with the name of one of the most remarkable statesmen of modern times. The existing departmental libraries at Bangalore might well be brought together, leaving perhaps highly specialised collections of books for the departments concerned, and amalgamated with the proposed central library which would be available to all the government departments and members of the public alike. The two City public libraries are, or at any rate ought to be, essentially municipal institutions. It would perhaps be as well to establish and declare them as such, giving them scope to develop so as to suit the tastes and requirements of subscribers or ratepayers. At present they are maintained as State-aided and closely controlled private subscription libraries, without legal or corporate ownership, or a steady legalised source of income. Their subscriptions are insufficient and are collected with difficulty, and institutions which should be self-supporting, or locally supported, have to depend on grants from the State.

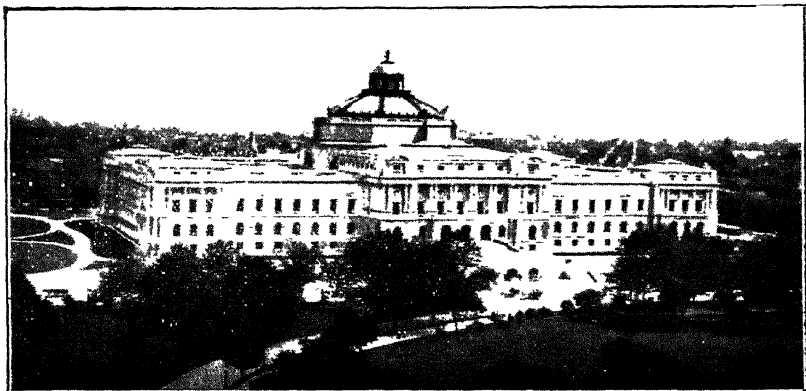
C. NAGAPPA.

REVIEWS OF BOOKS

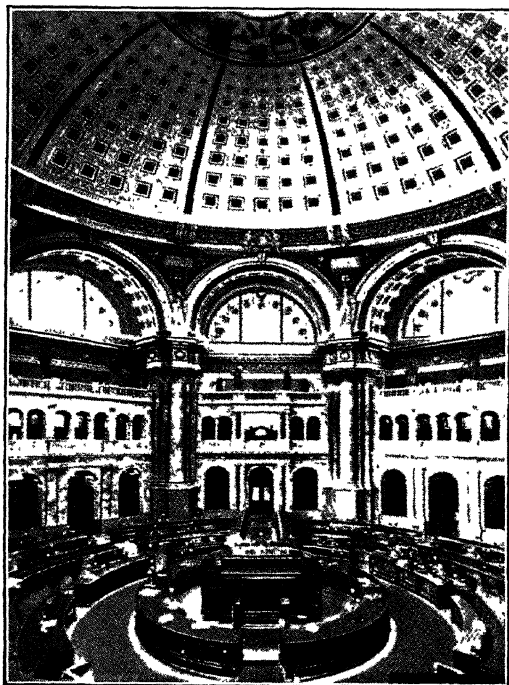
God and Personality, by C. C. J. Webb, Fellow of Magdalen College, Oxford. George Allen and Unwin, Ten Shillings and Sixpence net.

Mr. Webb is Gifford Lecturer for 1918 and 1919. "In these two courses of lectures," he says, "I propose to consider the subject of personality in our conception of the nature of God, the knowledge of whose nature and attributes is, according to the will of the Founder, to be the theme of the Gifford Lecturers." The 1918 course is contained in this book, and is concerned with "divine personality," while the nature of the 1919 course is forecasted by the lecturer thus,—“In the sequel I hope to consider what is the bearing upon our conception of human personality and of its manifestation in the various phases of human life, of that conception of personality in God which I have attempted to outline in the present course of lectures.”

Such a discussion of the nature of personality is timely, for a reason suggested by Mr. Webb himself. The severance caused by death on the battle-field has made the more insistent the question of the value of the individual personality in the scheme of things and the question of its survival or non-survival of death, and has rendered more acute than ever the human demand for a God who makes *personal* response to the appeal of sorrow. The present book is an invaluable help towards the clarifying and ordering of ideas. Nor are its methods and conclusions merely metaphysical. Much is made of the cogency of religion's instinctive desires and affirmations. It is "the religious experience" that "reveals in the ultimate Reality something which apart from religious experience is not there discoverable." This "something" is Personality, and it "is revealed in and through an experience of personal intercourse." Where, however, facts of spiritual experience are admitted among one's data, one must be careful that such experience at least approaches universality; and probably many readers will find that Mr. Webb's conception of the divine nature as presented to human experience differs radically from their own. In combating "the doctrine of a finite God," Mr. Webb is firm in the assertion that "the consciousness of standing in a personal relation towards God . . . is never, at any rate where it is the form of a genuine experience, the consciousness of standing in such a relation



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towards a 'separate' individual. There is ever present a sense at least of God's privacy to the thoughts and intents of our hearts which we could not admit in the case of a truly 'separate individual' as tolerable, even if conceivable." Whatever be the conclusion of metaphysic, one imagines that the general verdict of "religious consciousness" (which is here in question) would be that the divine Personality with whom we hold communion *is* a "separate individual," in spite of intimacy of relationship.

In spite of the reference to the present-day needs of ordinary people the book is by no means a popular manual of consolation. To a considerable extent it employs the "jargon" of the schools; and it is to the student of philosophy that we commend it, and that principally as an admirable example of the application, to a particular subject-matter, of a rigorous logical method, which is not merely applied but constantly brought into view. Of great interest is the discussion, in Lecture II, of the "history of the notion of personality in general," where, by reference to Greek and Latin origins, equivalents and related terms, the precise import and relationship of such terms as *person*, *individual*, *subject*, *substance*, are made clear—a necessary preliminary to the study of "personality," but also of much independent interest.

The argument, which leads to the Christian conception of God as infinite personality, both transcendent and immanent, entering, not figuratively but literally, into personal intercourse with men, we may leave to the tracing of the reader. If we may venture a remark upon the style in which Mr. Webb writes, we would pay a tribute to its extreme precision and its general lucidity, and at the same time voice a respectful complaint against such involutions as this—"It has been my contention throughout that, although the existence of personality must in any case give rise to problems which cannot but embarrass every philosophy unable to allow to it any but the subordinate significance assigned to it by all systems except those which may be classed as theistic, yet a satisfactory defence of Divine Personality can only be founded upon the facts of religious experience." The English language is by no means such a vile medium of philosophic communication as this sentence would suggest; and apart from the question of style a little remoulding here would have been merciful to the reader. But the exposition, in general, is most lucid; and those who cannot adopt Mr. Webb's views will nevertheless find in his book an excellent touchstone for the testing of their own.

Z.

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The Nature of Being, an Essay in Ontology by Henry H. Slessor, of the Inner Temple, Barrister-at-Law. London: George Allen & Unwin, Ltd., Ten Shillings, Six Pence net.

Mr. Slessor may well be congratulated on having written a very thoughtful essay on a subject requiring a very delicate handling. The book is divided into four parts, dealing with method, data, being and conclusion respectively. The first part is taken up with a study of the implications of language, since in philosophy "the appropriate naming of reality, words which are the raw material of nomenclature, become of cardinal importance." (p. 32.) In language noun and verb are the two ultimative categories, which mutually imply each other, for each thing "involves an event, and each event requires a thing possessing an essence capable of such event." From the duality of noun and event, the author proceeds to deduce the metaphysical dualism of substance and will. Mr. Slessor's position is distinct from the traditional Idealism and the New Realism of Mr. Russel. For him the universe is a field of battle for will to overcome substance. In his theory of knowledge he takes up an avowedly mystical attitude. The ultimate satisfaction of reason "must be aesthetic and ethical, and not wholly rational in character. The cause for this unsatisfactory inadequacy of reason is located in the fact that "the method of philosophy is one of relation, while the subject of philosophy is the unique unrelatived." In knowledge over and above substance and will we have a knower. But he cannot know himself, and Being for transcends knowledge. It is this assertion of Being beyond knowledge that is the distinctive note of the essay under review. Being itself comprises the full totality, but it does not lend itself to be thrust into "the Spanish boots of knowledge." There is Being beyond knowledge, but this Being beyond knowledge is unknowable. That is the conclusion of the book, tentative as most metaphysical conclusions are. But if the reader of the book is metaphysical enough to make a study of it, he will find in it an acute piece of reasoning that will amply reward him for his labour.

A. R. W.

"Introduction to Mathematical Philosophy," by Bertrand Russel.
London, George Allen and Unwin, Ltd., 10/6 net.

Mr. Russel has long been famous as a brilliant mathematician trying to revolutionise the study of philosophy through mathematics. But so far he has not succeeded in popularising his cause. For the generality of students of philosophy, the extreme symbolism of mathematics has been a repellant obstacle, and Mr. Russel has written the book under review with a view to popularise mathematical philosophy, and it expects of its reader "no more knowledge of mathematics than can be acquired at a primary school or even at Eton." But we are not sure that readers of this book will find it anything so elementary as the publishers' note will have us believe. The book is bristling with

figures, formulae and strange symbols, which make it almost as stiff reading as his larger volume: *Principia Mathematica*. But with all its inherent difficulties, the book is one which worthily upholds the author's great reputation. For subtlety of reasoning and the lucidity of diction, Mr. Russel hardly has a peer in the philosophic world of to-day. The rapid transformations of his thought, however, present very serious difficulties in the study of his philosophic system—if such a word can be applied to a philosophy which is yet in the polemical stage and hence has hardly settled down into a consistent coherent body of doctrine. Mr. Russel is great enough to be open-minded, and many of his old writings have already ceased to express his present views. The book under review marks a definite advance in several directions and hence is all the more welcome to the students of his philosophy. It is doubtful indeed if Mr. Russel will ever succeed in converting the entire philosophical world to his mathematical standpoint. Many are likely to say with Croce that “the pretended mathematical philosophers of this type are neither philosophers nor mathematicians,” but Mr. Russel's mathematical philosophy has vitality enough to survive the jeers of ignorance. What it wants is a will to master its subtle intricacies. For all earnest students Mr. Russel's present book will be almost a temptation to face the alluring difficulties attendant upon the present mathematical invasion of philosophy.

A. R. W.

Nothing. By G. R. Malkani, M.A., Indian Institute of Philosophy, Amalner.

This little pamphlet, written in rather terse and crude language, is devoted to the exposition of the nature of the concept “Nothing” with particular reference to the part it plays in the system of Bergson and the philosophy of Advaita. The author points out that while both agree in regarding the concept of bare nothing as a meaningless fiction, they differ in their views of reality. If non-being is unthinkable—for real thought is always the thought of a definite somewhat—and has meaning only relatively to the being which it implies, then it follows that the criterion of reality must be meaning and self-sufficiency. He thinks, and rightly too, that the Advaitic view of reality, as the eternal and changeless self, better satisfies this test than the dynamic creative elan of Bergson. But the detailed criticisms which Mr. Malkani urges against Bergson's conclusions are not quite convincing. He says that Bergson's conception of the real as creative is incompatible with the criterion of reality to which his analysis of the idea of nothing leads. For creative activity implies an external limit against which it strives, and thus encourages rather than discourages the idea of not yet or nothing. But what has he to say against

creation conceived as self-limitation by Hegel and his followers? Why should meaning be treated as fixed and opposed to creation? Is not a developing life for instance meaningful at any stage? For Bergson all is concrete and experimental. But this hardly rids us of the pains of opposites, and so fails to do justice to the self-sufficiency of reality. Advaitism is justly praised for its conclusive proof of the falsity of non-being by accounting for all the normal interruptions in consciousness such as sleep and dream. It regards these as the passing away and becoming of that which never becomes and passes away, and thereby brings home the unitary and persistent nature of the reality of self. It is the unknowable basis of our whole cosmic consciousness, riddled as it is with opposition and contradictions (e.g., being and nothing, light and darkness). Hence when self-knowledge is attained by knowing this as false, where is ignorance or non-being?

The author concludes the pamphlet with some remarks on zero. The problem of nothing in its relation to reality is so abstract and difficult that it requires further elucidation and development; but the author may be congratulated on his having paved the way for it.

D. SESHAGIRI RAU.

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Problems of National Education. By Twelve Scottish Educationists. With a Prefatory Note by the Right Hon. Robert Munro, K.C., M.P. Edited by John Clarke. (Macmillan. Twelve Shillings net.)

Education in Scotland has arrived at a critical point in its history. Two events have marked the beginning of a new era. The first and most important of these events is the conclusion of the war; the second is the Scotch Education Act of 1918. And in the varied essays included in this volume there is often present the conviction that Scottish education has reached the parting of the ways, and that a great deal will depend on the efforts of those who will direct its future course. The war has challenged the methods and ideas of the part, and it has brought to the acute stage the chronic controversies of the past. The Scottish Education Act is an attempt to meet some of the difficulties of the times. "It is," says the Secretary for Scotland, "first and foremost a measure of educational devolution." The administrative system, which had proved unequal to the burden laid upon it, is reformed, local authorities are set up for wide areas, possessed of large powers of initiative and of adaptation to local circumstances. They are to be elected by a method which renders possible the representation of every important section of educational opinion.

One of the questions most keenly discussed in these days is the question of the curriculum, both in school and at the university. Once

again the battle of compulsory Greek is raging in the columns of the *Times*, and there has come to the front again the eternal problem science v. the classics. It is, therefore, we may suppose not merely an accident that we find in juxtaposition in this volume two essays on "Classics in School and University" and on "The Place and Function of Science." The writer of the first is an eminent Scottish classicist, the other an eminent scientist. The enemies of the classics have for a long time been lying in ambush, but now the lessons of the war, or what they regard as the lessons of the war, have emboldened them to come out into the open and take the offensive. One is curious to see what attitude Professor Burnet will adopt in regard to the current criticism of the position of classics in the educational system. Professor Burnet adopted the course, not of apologising for the important place which classics hold in modern education, but of insisting that the need for studying classics is greater to-day than it has ever been. "The war" he remarks "has brought many grievous and irreparable losses, and it has placed western European in jeopardy. That civilisation is the direct heir of Hellas and Rome, and can be restored only by fresh contact with its origin. There must be a renewal of interest in the things of the spirit." At this point Professor Burnet touches on the question of science v. the classics. He does not disparage the value of scientific study. One of the ways in which a renewal of interest in the things of the spirit can be brought about is certainly that of scientific study. For science, too, is spiritual. "I will not insult science by regarding it in the vulgar way as the minister of material comfort, or even as the handmaid of national defence and industry. These things have their value, but they are byproducts. The deeper aspect of reality has never been hidden from the true leaders of science." But this writer considers that the approach to spiritual things will always be easier and more direct through letters and art, and the greater number will turn rather to the poets, historians, and philosophers for solace and edification than to the austerer discipline of the exact sciences. "That is for the few; the mass of men can hardly penetrate beyond its outer courts."

Both Professor Burnet and Professor Grierson in his article on the "Scottish Universities" indicate that the courses in the Scottish universities require reform. Professor Burnet seem to think that the curriculum of the secondary schools is at fault. Professor Grierson desires some putting back of the age of entrance and therefore of graduation. The degree examination is to mark the final stage in the general humanistic education, after which the specific or professional education of the student will begin. Professor Grierson contends that this general training must end at an earlier stage than at present, in fact at about twenty-one. This will set free some students for professional training, others for the pursuit of higher

learning with no further regard to examinations. The latter words suggest one of the great advantages of this system—namely, that the student will be out of the world of examination at a much earlier date in his career.

Dr. John Strong writes on the "Moral and Religious Elements in the School." In regard to the moral development of the child he insists on the necessity for the co-operation of parents with teachers. Until this co-operation is brought about, no satisfactory results can be reached in the moral and religious training of the children. Dr. Morgan emphasises the importance of the school's corporate life as a preparation for the duties of citizenship. Sir Leslie Mackenzie writes on "Physical Interests" and shows that the neglect of the development of the physical powers necessarily entails loss to the mental powers, and to the whole manhood. Miss Fish and Miss Ainslie write on the "Elementary and Secondary Education of Girls." The point which they emphasise is that the education of girls must re-adjust itself to the changed position of women in the social order. Mr. James Malloch claims that the standard of recruit secured in recent years for education has been higher than that for other professions such as law or medicine. Mr. Mackgillivray writes on "Fifty Years of Scottish Education." He reviews the work of the Education Department in the primary, intermediate and post-intermediate stages. This volume is of great value since it is written by a number of distinguished educationists, all of whom have had long experience in the subjects on which they write. The work should be a source of inspiration to many teachers.

A. B. M.

India's War Finance and Post War Problems. By V. G. Kale, Aryabhushan Press, Poona (p. 3-153-iii.)

This handy little volume is a welcome addition to the scanty literature on the War Finance of India. In spite of the magnitude of the subject, and the interest of its varied and unique problems, it is a fact that the subject of finance has in the last five years met with a distressing conspiracy of silence, both inside the Legislative Councils and outside. Prof. Kale, a profound admirer of the late Mr. Gokhale, judging from the number of the war-cries of the old stalwart he reiterates, has done well to invite attention to a subject of the highest importance. His general criticism is eminently just. There is, indeed, much in the financial shifts and expedients of the Government of India during the period under review which provokes such criticism, but which has been smothered by those afraid of the cheap accusation of a want of truly imperial sentiment or perspective.

Mr. Kale's work affords a good, brief review of the main events and measures during this period. Aiming at a connected account of the subject suitable to the average Indian reader, the book avoids any consideration of the basic principles of War Finance. A description without analysis, it is clear without being pedantic; critical if not profound; suggestive if not quite inspiring. After summing up the salient arguments on either side of a vexed question, the author has a way of withholding his personal opinion, which errs on the side of excess of modesty, and is even a trifle misleading in places to those unable to form an independent opinion for themselves on such technical questions as the Excess Profits Tax proposal or the Exchange situation. We are sure that Mr. Kale considers the Gold Exchange Standard to have broken down (p.131); but it is by no means equally clear from the book what remedy he would suggest for the present situation: we have a full summary of the reasons why the mercantile community was opposed to the Excess Profits Tax (pp. 98-92), but, in face of the repeated remark about a need for the redistribution of the tax burdens, we are not quite clear if the author welcomes the innovation, or would suggest any alternative with a view to redistribution. His quotation, similarly, of the decision of the Government of India in the Budget of 1915-16 not to levy any additional taxation but to meet the situation by means of borrowed funds, apparently with approval (p. 31), leaves us also in doubt as to the author's view in respect of this great question of principle:—financing wars by taxation v. financing by Loans.

Apart from these drawbacks the book is a thoroughly sound, orthodox criticism on the most approved lines of a most orthodox system of finance in the world. We should have liked a fuller treatment and perhaps a clearer expression of opinion on some of the innovations in finance, e.g., the new system of borrowing by means of short-dated Treasury Bills, or the Post Office Section of the last great loans. But perhaps the scope of the book, and its character would have been much altered if the author had entered into such discussions at any length. His views on the tariff measures, income-tax changes, sanitation and education expenditure are, of course, in perfect keeping with the general character of orthodox complaints and criticism of the Government of India in these respect.

The book would not be an Indian publication if there were no errors in printing. To give a few illustrations: the figure for revenue in the first column on p. 17 is obviously a misprint; on p. 41, line 11 "others" has been misprinted "othes;" on the next page line 21 contains "far" as an obvious misprint in the place of "for." But these are blemishes for which perhaps it would not be quite just to hold the author responsible.

K. T. S.

Aristophanes and the War Party, by Gilbert Murray. The Creighton Lecture, 1918. George Allen and Unwin.

Professor Murray never wrote a dull line, and he is even better to listen to than to read: one would fain have been among his audience. In this lecture he seeks, by re-vivifying a notable chapter of the past, to help towards the interpretation of the present. He wrote as the European war was coming to its end, and he seeks an illustrative parallel in the Peloponnesian War. He makes no strained comparisons, however; and while there is very great interest in his finding, in the Greece of that period, many elements strikingly correspondent to elements in the thought of England during the war, the main interest of the lecture lies in his most vivid reconstruction of party-life in Athens when she made her great though ill-fated struggle on behalf of democracy. One remembers being warned, in college days, against Professor Murry's notorious brilliancy, and counselled to salutary caution in the acceptance of his dicta. But there seem to be no suspicious generalisations here. There is good ground to tread upon, for there is no lack of distinct evidence both in dramatic and in historical records—the many passages of translation, some of them in verse, have all the felicity of Professor Murry's unique gift for the current expression of ancient things.

The Peloponnesian War was, in its way, a "world-war," and in many ways it resembled the much greater struggle of our time. "It was the greatest war there had been... It was a struggle between sea-power and land-power... It was a struggle between the principles of democracy and military monarchy." And in Athens, as in England, there was "a Peace by Negotiation party and a Knock-out Blow party," though here the comparison, if pressed in the slightest degree, would of course be most misleading. But Professor Murray notices "one similarity... which is profoundly pathetic, if not actually disquieting." In Athens, as among the allies against Germany, men were "haunted by shining dreams of the future reconstruction of human life." In Athens this hope eventually "dwindled to be very like despair." Yet this sad precedent does not seem to Professor Murry to be so very "disquieting" after all. "Our war," thus he begins his concluding paragraph, "has at least ended right: and, one may hope, not too late for the recovery of civilization." But there must be "some spirit of co-operation instead of strife, sobriety instead of madness, resolute sincerity in public and private things, and surely some self-consecration to the great hope for which those who loved us gave their lives."

In the body of the lecture a most lively account, illustrated chiefly by quotation from Aristophanes, is given of the bitter conflict between the Aristophanes-party and the Cleon-party, and a real contribution is made to historical judgment. Eventually there was

apparent triumph for the peace party, in the Peace of Nicias. But that Peace could not abide. "The impetus of the war was too great. The natural drift of affairs was in Cleon's direction." War was resumed, and—"ended wrong." Hellas was wrecked, and the Athens of Pericles' dreams were dead. "For Thucydides the dream of a regenerated life for mankind has vanished out of the future, and he rebuilds it in his memory of the past." For us there is a future, if we be wisely guided. Z.

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The Oxford History of India. From the earliest times to the end of 1911. By Vincent A. Smith, C.I.E., Oxford. Clarendon Press, 1919. Twelve Shillings and Six Pence net.

The author of *The Early History of India* needs no introduction or recommendation to our readers. We have always associated Mr. Vincent Smith with the early history of India. He now appears as the author of a general history of India, a subject which "has engaged his attention for nearly half a century." A good general history of India, brought up to date, suitable alike for college students and adult readers, was wanted, and Mr. Smith has admirably the want. The book runs into 800 closely printed pages. The paper is thin, but excellent in material and durability. Illustrations, appropriate, interesting, and abundant, are found throughout the book—the representation of coins being particularly good. There are useful chronological and synchronistic tables, and equally useful lists of authorities and references and hints for further reading, and it is gratifying to one reviewing the book from Mysore to see how well that State is represented in the list of authorities on the earlier history of India. Unquestionably it is desirable, as the author claims, that a general history of India should be the work of a single writer. But this has its disadvantages, especially in so big a subject as that of the history of India. Mr. Smith is himself a proof of the assumption that no one can be master to an equal extent of all parts of India's long history. Nor can we agree that the gain in erudition in composite histories is apt to be outweighed by their dullness. As a matter of fact, we know of no composite history of India, the chapters of which have been contributed by different writers. But we do know of writers who have written on special periods of Indian history and whose work is brilliant, not dull. Mr. Vincent Smith, who is an acknowledged master on the early history of India, is apt to be too dogmatic and egotistic in the latter part of Indian history. The pronoun "I" is constantly obtruding itself in the body of the work, and phrases such as "in my opinion," "in my judgment," "as far I can judge," "when I was Assistant Collector," etc. In critical sub-notes this is right enough, but is not good taste and is inconsistent with the

sober narration of historical facts when introduced into the body of a work. The merits of the book will soon make a second edition necessary, and we trust that Mr. Smith, will remove these blemishes. It is not only the obtrusion of the personal element to which we object. We disagree with the author's judgment on more than one occasion, and are conscious that by so doing we incur Mr. Smith's contempt. But it must be admitted that the author has succeeded in making his pages intensely interesting, a creditable performance when we remember that the period covers more than two thousand years. The latter half of the book contains a number of interesting facts not generally found in the ordinary text-books, and the style and method employed are a source of stimulation to the reader. The book is bound to supersede the general text-books in use by college students. As prices go nowadays, the book is remarkably cheap. With a wider space between the lines, the book would make pleasanter reading. But that would probably necessitate two volumes instead of one, and that has to be considered when the pockets of students are concerned.

Baroda Library Movement. By Janardan S. Kudalkar, M.A., LL.B., Curator of State Libraries, Baroda. pp. 79, with 40 Illustrations, Statistical Tables and a Diagram. Baroda, 1919. Two rupees and eight annas.

H. H. the Maharaja Sayaji Rao Gaekwad of Baroda is rightly considered to be the pioneer of the Public Library movement in India ; for though there have been, for a long time past, large and growing collections of books in several parts of India intended for the student and scholar, the Free Public Library as an integral part and complement of public education was quite unknown to the country before it was introduced in Baroda about ten years ago. The need for and the scope of Free Public Libraries as an effective means of Public Adult Education cannot be better described than by the following words of H. H. the Gaekwar: "The people must rise superior to their circumstances and realize that more knowledge is their greatest need, their greatest want. They must be brought to love books. They must be taught to make books a part and parcel of their lives. The libraries would not then be a luxury, but a necessity of existence." Baroda is quite within a measurable distance from this high library ideal.

The Library movement and organisation in Baroda have at present all the characteristic features of the most up-to-date American system. The only difference, if not a drawback, is that while the typical public library in America is a municipal institution managed and maintained by the capable members of the local

community for the benefit and free use of every member of the community, public libraries in Baroda are, to a very large extent, maintained by State aid, though the district, taluk and village libraries are appreciably supported by grants from local bodies and public subscriptions. A central library, equipped and maintained at the expense of the whole country as a national monument and large reserve for a network of municipal rate-supported and locally-managed libraries, is doubtless the best organisation one could think of ; but conditions in India are, perhaps, not yet favourable for such an organisation.

The institution of the Library Organisation in Baroda on the best American model, and its phenomenal success within a short period of about ten years, are due to the farsighted policy and noble beneficence of H. H. the Gaekwar ; and the progress of the library movement was also greatly accelerated by the wise and generous educational policy of the State. Considering the general backwardness of India in these respects and the slow progress of such institutions as the Free Public Library, the rapid and many-sided growth of the library movement in Baroda is really marvellous. The organisers of the movement have caught the real public library spirit of America, and are taking the most effective measures to induce and encourage people to take to reading as a healthy recreative employment as a part of their daily lives. The initiation of the library movement in Baroda on modern lines was taken in hand by an American expert, Mr. Borden, in 1910 ; and within a decade the State, with an area of 8,100 square miles and a literate population of about two lakhs out of a total of about two million, has a network of over 600 libraries and reading rooms with a total stock of over 300,000 books and a circulation of over 283,000. The Library Organisation at present comprises an efficient Central Directing Library Department, a Central State Library with over 66,000 books, 42 Town Libraries and 494 Village Libraries with a stock of nearly 220,000 books and 441 Travelling Library cases with over 15,000 books in them, very well organised and equipped Children's and Ladies' Sections and an excellent Visual Instruction organisation in connection with the Central Library, a large staff of trained librarians and library assistants and a most promising, though of very recent origin, Sanskrit Research Branch.

Mr. Kudalkar, to whose energetic endeavours the success of the Baroda library movement owes a great deal, has given in the book before us a very interesting and valuable record of the progress of the movement from its initiation to the end of July, 1918. The several illustrations and statistical tables add to the value of the book, and the diagram at the end gives the present library resources and operations in the State at a glance.

The Measurement of Intelligence. An explanation of and a Complete Guide for the use of the Stanford Revision and Extension of the Binet-Simon Intelligence Scale, by Lewis M. Terman, Professor of Education, Leland Stanford Junior University. With an Introduction by J. J. Findlay, M.A., M.Ed., Professor of Education, Manchester University. London, George G. Harrap & Co., Ltd. Price Seven Shillings Six Pence net.

In these days when special importance is being increasingly attached to tests for the subnormal, or mentally deficient, and the supernormal or mentally superior, it is essential that teachers should have available a text-book giving the tests for the general intelligence of school children. The results derived from the application of a system of accurate measurements of intelligence are of the highest educational value. It is no exaggeration to say that these results may be made to have a direct bearing on questions relating to the choice of studies, vocational guidance, schoolroom procedure, the guarding of pupils, promotional schemes, the study of the retardation of children in the schools, juvenile delinquency, and the proper handling of subnormals on the one hand and gifted children on the other.

The Binet-Simon's method is now practically for the first time made available for English teachers. The book before us is written in language so simple that even the general reader will follow the details with ease, and grasp their scientific significance. The Binet scale is made up of a series of tests or problems in which the intelligence is called into play. The scale consists of fifty-four tests so graded that the easiest come within the range of three-year-old children, while the highest test makes a demand on the intelligence of the average adult. The tests were tried on some 200 normal children of different ages from three to fifteen. If a test was passed by 65 to 75 per cent., say, of normal 9-year-old children, it was considered as a test of nine-year intelligence. The different tests for different ages are given in detail, and certainly they enable us to test the intelligence of a child in a far more definite way than the use of such descriptive terms as "bright," "moderately bright," "dull," "very dull," "feeble minded," which are used in different ways by different people. But a very definite meaning is attached to the term three-year mentality, etc. The system as worked out in the book is simplicity itself, and the wonder is that the discovery, which now ranks as one of the most important in the history of psychology, was not thought of before. But the system, simple as it appears, took Binet fifteen years to work out by means of practical experiments. But the Binet system had its limitations and imperfections, and it was for the purpose of correcting these and extending the tests that the Stanford investigation was planned. The revision took several years and involved the examination of some 2,300 subjects, some of whom were supernormal and others subnormal. Mr.

Terman, Professor of Education in the Leland Stanford Junior University, has now brought together in one book an account of the Binet system and its revision and extension by the Stanford investigation. Mr. Findlay, Professor of Education in the Manchester University, has written a lucid and appreciative introduction by way of bringing the system to the notice of English teachers. The book with the accompanying Test Material for the Measurement of Intelligence ought to find a place in the normal schools and teachers' colleges of India. Never was there a time when intelligence was in greater demand than it is to-day. All the more necessary, therefore, is it that intelligence should be scientifically tested and developed on lines such as are indicated in this book.

A New School in Belgium. By A. Faria De Vasconcellos. Introduction by Adolphe Ferriere. Translated by Eden & Cedar Paul. London, George G. Harrap & Co., Ltd., 1919. Price Five Shillings.

A New School in Belgium does not mean merely a new building for a school run on the ordinary lines. The New School at Bierges is a striking example of the New Education which is coming into vogue, and a more intensely interesting concrete example of the new education we have never read. So recently as 1912 the author founded the school on new and revolutionary lines of self-government and self-support, the object being to produce young men well equipped for becoming efficient citizens. The experiment, as long as it lasted, was most successful, but it was cut short by the Great War in 1914 which was so terrible a blow to those who had trusted to treaties and the peaceful settlement of international problems. But the author has not lost heart, and hopes to take up the work of the school again. He has no fear for the educational future in spite of abuses in Germany. "On the contrary, education, glorifying and magnifying the humanity that is in man has rendered it possible for us to stand erect in face of the resurrection of ancestral brutalities which has resulted from militarised education on the other side of the frontier." Many people in France and in Belgium have been concerned to know exactly what was meant by the New School, and the present book has attempted to give the answer. It is based on three lectures delivered by the author at the Institute J.J. Rousseau, and the picture drawn of the new school is one of the most vivid that can be imagined. In a valuable introduction to the Book. M. Ferriere shows that there are some thirty characteristics of the New Schools already in existence. These he divides under three heads—(1) the environment, (2) mental or intellectual, (3) moral, social and artistic. We will just mention the heads of the first group to indicate to our readers the nature of the New School:—the

School is a laboratory of practical pedagogy, it is a boarding school, it is situated in the country, the pupils are grouped in separate houses, co-education is practised in boarding schools where the conditions are favourable, the pupils engage in manual work every day and a leading place is taken by carpentry, the tilling of the soil and the rearing of small animals, space is left for free occupation, physical culture is ensured by natural gymnastics, and excursions and camping out form an important part in the New School. The mental and moral characteristics are equally striking. A list is given of New schools in England, France, Germany and Belgium in which between twenty-two to thirty of these characteristics are found. The total of such characteristics at the New School at Bierges near Brussels is 28½. The author is an enthusiastic and experienced pedagogue, who writes with great keenness and stimulus, and the book is bound to interest and edify its readers. We are taken through all the characteristics of the New School in working, and so vivid is the sketch that it is the very next best thing to paying an actual visit to the school. The school had a magazine entirely edited and written by the pupils, and its style and account of the different activities of the school afford a striking proof of the excellent work—mental and physical—which was being done. If space permitted, we would have quoted one of these compositions, which of course are not models of style, but simply spontaneous outpourings expressing exactly what the child feels. We would strongly advise every teacher and those interested in education to read one of the most interesting books on the new education which has come to our hands.

Whittier and His Poetry, by Henry Bryan Binns. Poetry and Life Series. Harrap, London.

A poet whose apologist denies him "strong imagination or creative power," depth of thought, or sure sense of form and style, and adds, to his further damning, that his views of life and art are narrow and that his best has only glimpses of excellence, but who yet has an apologist, and who undoubtedly has written poetry, must have the seeds of greatness in him. Perhaps of Whittier it would be truer to say that he was the fertile soil on which fell the seed of a great opportunity. The cause of anti-slavery gave him a trumpet-tongue but also gave new impetus to his gentler strain. It was when he came back to her after the turmoil of a great struggle that the Nature he knew and loved so well gave him her best inspiration, revealing then, in addition to her own beauties, the interpretation of human difficulties and trials. And it is there later poems of his, dealing with homely and rustic New England scenes, that live and

will live in every English-speaking country, even though the name of John Greenleaf perish with the fading records of his life struggle.

But his present biographer does much to prevent that deplorable event, for he presents us with a lovable and noble personality, counter-balancing his preliminary censures by clear and practical proofs of high principles, deep-seated sympathies, an indomitable sense of justice, and a disregard for private interests which, with the gift of utterance, made Whittier a poet in despite of circumstance. And the memory of Whittier perhaps deserves to live even more than his written work, for he stood for a cause whose effects multiply as the years go on. This, we take it, is the aim of the Poetry and Life series that a man should be known as well as his work, and that his work should be fraught with deeper meaning because of its interpretation in his life.

X.

"As a Man Thinketh . . ."—the personal problem of militarism.

By Ernest Ewart Unwin. George Allen and Unwin, Two shillings and sixpence net.

The author of this little book is a Quaker schoolmaster. It is a quiet and earnest exposition of those ideas that run counter to "militarism." Unfortunately the author appears to consider militarism the inevitable characteristic of those who prepare for war. Lord Roberts, a profoundly religious man, whose one military aim was the guarding of the world from the domination of militarism by the only practicable means, that of armed preparedness, is, to Mr. Unwin, a militarist. It seems strange that "conscientious objectors" cannot see how evil would have been their case but for the force of arms. Mr. Unwin writes of evolution, of true and false ideas of God, of war as the negation of personality, and of Christian ideals; and he writes rather vaguely and superficially, though with obvious sincerity. It is not difficult, however, to show that war is a disastrous business, and that in an ideal world it would have no place. It is when one considers the remoteness of the ideal, and comes to debate the practical means of its attainment, that one sees that the pacifist short-cut leads to mere disaster. This is an impatience that leads men into active, though unknowing, disloyalty to their country and also to the very cause they idolise. Mr. Unwin is prepared to urge the English school boy to refuse military training if it be enforced in schools. "The call may well come to the boys and girls of the nation to save the schools . . . by refusal to learn the arts of war." There is a type of mind that cannot perceive the profound immorality, as well as the practical un wisdom, of such counsel. But it can do no harm, since books of this kind are read only by the reluctant reviewer and by people that already hold their doctrines.

Even the latter will not be able to build much upon the very slight logical structure of this book. Z.

The Story of Doctor Johnson.—Being an Introduction to Boswell's *Life*. By S. C. Roberts, Cambridge University Press. Four Shillings and Sixpence.

We heartily congratulate Mr. Roberts on the admirable way in which he has accomplished a by no means easy task. The book, of course, is not intended to supersede the immortal Boswell—nothing could do that. On the contrary, its object is to attract young readers to that writer; and for that matter the large number, alas! of adults who have not the exquisite pleasure of an intimate acquaintance with the world's first autobiography. To some of those who know and love their Boswell, an introduction to that writer may seem not only superfluous, but even insulting to that inimitable biographer. But a perusal of Mr. Roberts' *Story*, which even the most ardent admirers of Boswell may read with pleasure, will show that the introduction is justified. Boswell has not been paraphrased by Mr. Roberts, but has been quoted in paragraphs with, when necessary, felicitous explanations. The book has an appropriate and charming eighteenth century setting, the type, paper and illustrations each assisting to confirm the pleasing illusion. The illustrations, which add greatly to the value of the book, are reproductions from contemporary engravings and drawings. The Contents show how Dr. Johnson has been presented "in the various stages of his career and in the varied circle of his friends." The headings are:—The Boy, the Adventurer in Literature, the Man, the Social Friend, the Traveller and the True-Born Englishman. Unquestionably it is just the book to attract to Boswell's *Life* the young and those to whom the biographer is but a name. It would make a delightful gift or prize for young people. As an English text-book, it seems admirably adapted for the Intermediate stage in our Universities, and for the Entrance Examination of the Mysore University.

Bell's Mathematical Series for Schools and Colleges—General Editor: W. P. Milne, M.A., D.Sc. 1. *Dynamics*. By R. C. Fawdry, M.A., B.Sc. Crown 8 vo. Part II (pp. 179-355). Bell and Son. Two Shillings, Six Pence.

This is a fairly reliable introduction to the study of Dynamics of Rigid Bodies in the earlier stages. Two introductory chapters deal with the applications of elementary Calculus to Dynamics, and many interesting experiments are described in the book which are not usually found in ordinary text-books. The book is practical through-

out and chapter XVI contains an informing discussion of the Waterwheel.

The attention of the author is drawn to the following:—

- p. 193. We think "*the parabola of safety*" should rather have been styled "*the parabola of danger*."
 p. 246. '*F Sm ϕ r*,' should be '*Fr, Sm ϕ .*'
 p. 263, Ex. 9. '*Pv*' should be '*Pu*.'
 p. 311 (l. 8 from bottom) '*w*' should be ' *Ω* .'
 p. 312, l. 1. '*B*' should be '*A*.'
 „ l. 7. Insert '*w*' after '*angular velocity*' and read '*B*' for '*A*.'
 PP 346,7. The dots over *o* and *x* are indistinct and should be carefully printed.

2. *A First Course in the Calculus*. By W. P. Milne, M.A., D.Sc., and G. J. B. Westcott, M.A. Crown 8 vo. Part I. "Powers of *x*" (pp 1—xx; 1—196) Bell and Son.

The book is intended as an easy guide to the calculus and is based on geometrical and graphical methods. It avoids all discussions of a philosophical nature which render the subject so *abstruse* in the classroom, and appeals chiefly to the non-specialist student in his school course. However, the reader has nothing to unlearn when he comes to study the subject more vigorously in the university course. A feature of the book is the interesting *Historical Introduction* (pp. —xx). The subject matter is spread over ten chapters covering the usual ground. Numerous worked examples are interspersed throughout. About 600 examples for practice are given on the whole. Together with the companion volume (Part II), the work may be used as a text-book for the B.A. degree examination.

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Harrap's Introductory Algebra, by W. Farquharson, B.A., 1917, pp. 1-172. One Shilling Six Pence. G. G. Harrap & Co.

The book is an attempt to present 'the facts and difficulties of elementary algebra in a natural order of evolution.' The Socratic method of '*question and answer*' has been employed in introducing new ideas. The treatment of Algebra as emerging out of arithmetic is kept in view steadily. The revision exercises and examination papers are useful additions to the book.

The wording of some portions is not free from objection, as, for instance, the rules printed in black type. Further, no attempt is made to introduce graphical illustrations.

On the whole, the book deserves to be in the hands of every school teacher of Algebra. We would recommend the book to the Educational Department for translation into the vernacular in connection with the Departmental text-books.

The Man-Eaters of Tsavo. By Lieut.-Col. J. H. Patterson, D.S.O. Abridged by H. Wyatt, M.A., with illustrations. Macmillan, 1919.

This is a little book, if blood-curdling adventures with lions count for anything, which should be a great success as a reading book in high school classes. We read the book through with avidity, and imagine there are few boys who will not do the same. Some of the stories of the audacity of the man-eaters seem incredible. The editor says that the book is intended for high classes of Anglo-Vernacular schools as a medium for practice in English usage. Col. Patterson's language and style are admirably adapted for this purpose, being as simple and direct as one could wish. Each chapter is followed by exercises, some of which would be superfluous for boys whose mother-tongue is English, but by no means so for the Indian boys for whom they have been carefully prepared. The illustrations are reproductions from photographs, and add much to the interest and usefulness of the book.

Hindu Tales from the Sanskrit: Translated by S. M. Mitra and adapted by Mrs. Arthur Bell. Macmillan and Co., 1919.

This is a book belonging to the series "English Literature for Secondary Schools" edited by J. H. Fowler, M.A. The stories, nine in number, are all well chosen and the manner in which they are narrated is such as to appeal to the fancy of the young readers. Each story is divided into several sections, every one of which is followed by a set of questions designed to call into action the mental powers of the children. The book is primarily intended for English boys and girls; but we can heartily recommend it to Indian pupils also, who, although they may be more or less familiar with the stories, are sure to profit by the charmingly simple English in which it is written. The presence of suitable illustrations would have greatly added to the enjoyable character of the book.

A History of India for Upper Classes. By C. P. De La Fosse, M.A., Macmillan & Co., 1918.

This is a comprehensive work and gives, within the compass of about 350 small pages, a survey of the whole of Indian history from the age of the Rig-Veda to 1911, the year of the Imperial Coronation at Delhi. The book is fairly well illustrated; and another of its satisfactory features is the adequate treatment it gives to early Indian history. It is, however, too much packed with facts and if used as a class-book, is likely to lead to an overburdening of the pupil's memory. The author, besides, does not always appear to be

quite fair in judging Indian men and institutions and uses words like "inglorious," "savage" and "tyrant" somewhat freely in describing them.

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Lord Macaulay. History of England. Chapter I. Edited by W. F. Reddawar, M.A. Pitt Press Series. Cambridge University Press, 1919. Two Rupees, Three Annas.

There is a useful and interesting Introduction giving all that it is necessary for the young student to know of the merits and defects of Macaulay as an historian and stylist—"the greatest historian the world has ever known" according to the verdict of the English historian, Stubbs, and Mommsen, the German historian. Macaulay's matter and style lend themselves to making his first chapter admirably fitted as an English non-detailed text-book for the Intermediate Classes of our Indian Universities.

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We are not called upon to review Tout's well-known text-book, *An Advanced History of Great Britain* (Longmans), and the book needs no recommendation. But some of our readers would like to know that a new edition has just been issued which brings the history down to the Armistice of November, 1918. The additional chapter gives a clear, concise yet interesting summary of the events of the Great War. The new edition has the great advantage of selling at the old price of seven shillings and six pence. As our readers know, the price of most books has gone up enormously.

GENERAL EDUCATIONAL NEWS AND NOTES

A MOST noteworthy event of the year in Mysore is the issue of an order by Government making the Economic Conference after eight years of trial a permanent part of the administrative machinery under the designation of the Mysore Economic Development Board. Of the four sectional boards of which it is to consist, the Board of Education interests us most. It will in future be composed of twenty technical experts and laymen, official and non-official, as follows: the Inspector-General of Education; a representative of the University; two representatives of aided agencies; eight members elected by the eight District Boards; two members elected by the Representative Assembly; two representatives of Women's Education; three representatives of special communities; one representative of the Text-Book Committee; and others nominated by Government. The Board is to meet at least once in two months. Its functions consist of the investigation of all educational questions of interest, carrying on experiments, formulating schemes for improvement, collecting and spreading information of value by means of bulletins, lectures, etc., and generally advising the public in respect of measures affecting their educational welfare. Ordinarily the execution of schemes formulated by the Board and approved by Government will rest with the Education Department. But in cases where Government specially so direct, the Board may itself undertake the execution of any scheme. It will have full initiative and financial autonomy subject to budget provisions. Corresponding to this Board there will be in the District, the Taluq, and the village, committees with local educational offices and others to deal with local educational matters. This educational section of the Conference has, it must be said, justified its existence by much valuable work during the past eight years. Among its important contributions are the schemes relating to compulsory education, the expansion of elementary education, the public library organization, the district industrial schools, the vernacular high schools, training in home industries, development of the education of depressed classes, women's education, scholarships for backward and depressed communities, visual instruction, and other items of which, not the least in importance, is the University of Mysore. Seeing that the tendency all over the world is to associate educational administration with boards or representatives of the public,

it augurs well that Mysore is taking another step in the direction in consulting the public in so vital a matter as education, which more than any other of Government's activities, affects every citizen. Now that the Economic Conference, under a new name, has a permanent status, we wish it a long life of still greater usefulness.

THE foundation stone of the additional buildings for Queen Mary Women's College, Madras, was laid last March by Lord Pentland, on the eve of his retirement as Governor. The estimate for the present extension of the college is $2\frac{1}{2}$ lakhs of rupees, of which sum one lakh has been given by the Maharaja of Jeypore. Lord Pentland before laying the foundation stone said: "During the continuance of the war education inevitably suffered, but its effects were perhaps least seen in the sphere of higher education for women. Such rapid strides have been made that female education has at last been placed on an unassailable basis."

INDIA is again to be congratulated on the success of her sons in the Cambridge Mathematical Tripos, Part Two, and in the Natural Science Tripos, Part Two. Most of our readers will know that Part Two of the Tripos is a much more difficult business than Part One, and that it is not attempted by many of those who have been successful in Part One. The names of the successful candidates are:—M. B. Bhansali, Bombay; S. G. Sangodayan, Presidency College, Madras; M. M. Shah, Fergusson College, Poona; Gunjekar R. S. Inamdar, Bombay University. We are able to give the following particulars of the student from Madras. Mr. S. Sangodayan is a non-Brahmin Vellala and belongs to the Gownder community of Coimbatore. He was born in a village near Erode, and his father is the Village Munsiff of Kangayampaliam. Joining the Madras Presidency College in July, 1912, he passed the Intermediate Examination in the first class two years later. Mathematics were his forte, and he came out top in this subject in the B.A. (Honours) list in March, 1917. Mr. Sangodayan was awarded a Government of India Scholarship by University of Madras and went to England in 1917.

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WE congratulate Professor J. B. Raju, M.A., B.Sc., of the Madras Christian College, on his appointment as Professor of Mental and Moral Science in the Indian Educational Service. He is posted to the Morrison College, Nagpur.

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THE total earnings of the pupils of the Government Mochi School at Nagpur, during the year 1918-19, were over Rs. 38,000. The

school was opened in the year 1912 for the express purpose of training local mochis and improving local leather work. During this period 23 pupils have been passed out fully trained, equipped with tools and supplied with capital. By means of co-operative effort these pupils have been able to undertake the supply of boots and leather equipment for the Police and Jails, and for the Postal and Forest Departments.

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SIR RAJENDRANATH MOOKERJEE, in his speech at the Commercial Institute, cited two main handicaps under which Bengali youths labour when entering commercial life. These are early marriage, and the defective system of education. Sir Rajendranath pointed out that in this country a student cannot complete his university education until he is 21 or 22 years old, and if he attends a special course at the Commercial Institute for a year he will be 23, by which time, generally speaking, he will be a married man with a family of one or two children. He cannot then afford to join a mercantile firm as an apprentice on little or no pay; consequently he misses the hard practical training which is needed to make him competent for a good post. This is why mercantile firms are obliged to spend money in bringing out assistants from Home. What Sir Rajendranath Mookerjee has to say on this subject is clearly sound and true. At the same time it is hard to see how the Bengali youth can help himself without a general reform of marriage customs and a remodelling of the educational system.—*The Statesman*.

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MR. FINDLAY SHIRRAS, Director of Statistics, delivered an address at the Social Service Exhibition at Dacca, on March 6, on "The War and Indian Trade," from which we take the following extracts: The three great requirements of India at the present time are (a) more and better education, (b) greater banking facilities and (c) more adequate and easy means of transport. "It is with regard to the first of these three problems that I shall refer, as our whole future success in commerce and industry depends on education. Education is of sovereign importance because it is the key to employment and prosperity, and indeed to all national advance. I confess to being an enthusiast on this, and the more we examine the problem from an industrial and commercial standpoint, the more do we see how true it is that until primary education is more widespread, industrial advancement will have no sure foundations. There will be no raising of the standard of living and no enhancing of the value of the people's labour until primary education is more accessible. Our secondary and our collegiate education with the terrors of the examination hall do anything but divert our young men from literary or legal careers. . . .

We shall, by a better and different system of primary education, make the workman able to earn more and to be, in short, a more efficient worker. By secondary education we shall produce workers of ability able to supervise the ordinary labourer, and by scientific, industrial and technical education in our universities we shall be able to turn out men capable of undertaking administrative and industrial work."

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AT a recent meeting of the Senate of the Calcutta University Sir Asutosh Mukerjee moved a resolution raising the examination fees all round, the Matriculation fees from fifteen to twenty rupees, Intermediate from thirty to thirty-five, B.A. from forty to forty-five, B.A. Honours from forty to fifty, M.A. from fifty to eighty, and Law from fifteen to thirty. Sir P. C. Roy opposed the motion on the ground that poor students would be put to considerable hardship by the raising of the fees. The way to improve the financial condition of the University was not by taxing the poor students, but by finding some munificent benefactors who would liberally contribute to the funds of the University. The increase in fees will yield an income of two and a half lakhs of rupees. The resolution was carried by a large majority.

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HIS EXCELLENCY Lord Ronaldshay, Rector of the University, recently unveiled at the University College of Science, of Calcutta, the statues of the late Sir Tarak Nath Palit and Sir Rash Behary Ghosh. He said that special significance was attached to that particular ceremony on account of the character of the services which those two gentlemen had rendered. His Excellency well remembered how the late Mr. Gokhale used to insist that the foremost duty of a University was to add something to the sum total of human knowledge. The special significance, then, which attached to the services of those two gentlemen lay in the fact that they had enabled the University to undertake that supreme task. By the magnificent gift of 25 lakhs of rupees they had not only made possible the erection of the Calcutta College of Science, but they had also endowed the Chairs and Scholarships necessary for the research work of which it was to be the home.

IT is gratifying to find that Professor Jevons, of the University of Allahabad, is making an earnest appeal for books in the subjects of Economics, Sociology, and political Science. In the course of the appeal he gives figures showing the size of the libraries of certain foreign universities as they were ten years ago, with similar but recent figures of certain Indian Universities:—Oxford, 800,000 ;

Cambridge, 700,000; London, 195,000; Aberdeen, 200,000; Liverpool, 80,000; Birmingham, 72,000; Harvard, 1,121,000; Chicago, 459,000; Princeton, 306,000; Kyoto, 10,000; Calcutta, 40,000; Lahore, 30,000; Allahabad, 12,000. Of the Allahabad total of 12,000, 5,700 are official publications presented by Government. The remaining 7,100 have been obtained by purchase and donation. Out of these, again, the number of books representing the important group of related subjects—sociology, geography, political science, as well as commercial and business practice, agriculture and technical industrial subjects, is only 570 volumes. Professor Jevons estimates that a representative library in the above mentioned subjects alone would extend to at least 20,000 volumes. Then only would the university be an efficient centre of research in these subjects as regards Indian conditions. The total cost of providing them is estimated at about Rs. 75,000.

THE Punjab University has undertaken the compilation of an extensive Punjab dictionary. The work was originally suggested by Sir George Grierson, and the Punjab Government are giving a grant for the purpose. The publication of dictionaries of this kind is an essential part of the work of a University, and we wonder if there is room for a Kannada dictionary, up-to-date, in supersession of Kittle's dictionary, which has served a very useful purpose, but needs to be supplemented. Why should not the Mysore University undertake such work?

THE Education Department of the Punjab is fully alive to the importance of the whole subject of the training of teachers, but it is unfortunate that while 1,085 men were under training this year, the figure is less by 89 than the corresponding figure for last year. On the other hand, the number of women under training has increased by 61 to the figure of 323. The demand for admission to the Central Training College grows year by year, and, what is more important, the quality of the selected candidates steadily improves. Proposals are at present before the Government of India for a complete revision of the staff of the College, and for a strengthening of its numbers and qualifications to enable it to discharge the increasingly important function it performs in the educational system of the Punjab.

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COMMENTING on the Bombay Budget, the *Times of India* remarks:—The vital matter which has been practically ignored, is the education of girls. So far as we can gather, only two items in the Budget have a bearing on this department. They are an increase in

the salaries fixed for lady-graduate teachers, and the construction of a new building for the Poona Training College for Women. This is a disappointingly poor provision for one of the most important needs of the poor. We see from the quinquennial report on the progress of education in India during 1912-17, that Bombay has not made progress in girls' education at the same rate as some other provinces. His Excellency's programme of social reform will be sorely handicapped unless a far more vigorous policy takes the place of the long apathy in regard to women's education which, we fear, has been a besetting drawback of the Government of Bombay. Without the co-operation of women social reform must largely be pure window-dressing, and the co-operation of women can be intelligent only if they are educated as well as men. This, we should think, is an axiomatic truth, and we hope the next Budget will contain much stronger practical proof of its realisation by Government than does the present.

THE Bombay Government have recently appointed a committee to inquire into the whole question of providing additional facilities for education in the Government Arts Colleges by means of increasing accommodation in existing colleges and opening new colleges in suitable areas. The development of the tutorial system which has now been introduced in some form or other into nearly every college, is a matter to which the Governor in Council attaches very great importance. He does not regard this system, which forms so fundamental a part of university education in the older English universities, as an insidious method of forcing backward students through their schools, but as a means for establishing a personal relationship between student and teacher and infusing the true scholastic spirit into the dry bones of the lecture hall.

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LADY Tata made an excellent speech last month at the eleventh anniversary celebration of the Seva Sadan Society at Girgaum, Bombay. In the course of her speech Lady Tata said:—The spirit of unity in living together with women of other castes and creeds, away from their own homes, in realising the benefits of closer contact with others, must necessarily broaden their outlook on life, and take them out of the narrow groove which unfortunately pervades the home life of many of those women who have not the advantage of education and communion with the outer world. The practical instruction in sewing, dress-making, cutting out and manufacturing of hosiery, which is given to hundreds of poor widows and girls, thus enabling them to earn a substantial living as well as training them to lead useful and healthy lives, is most valuable. The daily attendance at these classes is very satisfactory, and the fact that

they are able to earn as much as annas twelve or one rupee a day with only four or five hours' work, and in addition get free tuition in English, Gujarati, singing, drawing, fancy work, first-aid, etc., proves how beneficial and useful these classes can be. The cookery class is proving a great success. These girls are able to earn after a few months' training on an average from annas six to annas twelve a day, and advanced pupils when executing large orders, such as for weddings or parties, can earn as much as Re. 1-8 or even Rs. 2 per day.

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PROFESSOR KALE, of the Fergusson College, Poona, delivered an address last month to the Bombay Branch of the Students' Federation. His one object was to lay stress on the responsibilities which were thrown upon the shoulders of students at the present time. Whatever the Government and the colleges might or might not do to improve the status of education, the students themselves had a duty to perform; discipline and training and apprenticeship were everywhere essential. Habits of patience and intelligent study of subjects, independent thinking, of discipline and of aiming high, had to be cultivated. Students must play their own part properly and make their own contribution to the progress of their country. In passing, Prof. Kale alluded to the curious errors which had crept into the report of Parliamentary debates published in Hansard's volumes. Dr. Hopkinson was made in them to refer to what was presumably Tata's Iron Works as those successfully conducted by a "Tartar" Company, and Dr. Fisher is made to attribute to Lord Morley an educational reform for which Lord Macaulay deserves credit.

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THE Indian Women's University, Poona, is likely to benefit to the extent of Rs. 30,000 by the will of the late Mr. V. R. Lande, Sub-Assistant Surgeon, originally of Nagpur. This gentleman had acquired property in East Africa where he put in fifteen years service; and a few days before his death he made over the greater part of his property to a number of educational institutions.

PROFESSOR OLIVER ELTON, at a meeting of the English Association at Bedford College, said that in India everything educational was really political, more especially instruction in the English language and literature. The goal to be gained by the Indian, speaking broadly, was not culture or letters, but a salaried position, however small, under the State. . . . The Indian had been forcibly fed with our literature ever since Macaulay's minute enacted that English letters, history and lore should be the diet of the literate class in schools and colleges. Consequently the Indian in general accepted

it as the order of things. He did not always dislike it, but did the training sink in the soil? "Romeo and Juliet," the *Vita Nuova* or "Jane Eyre" were equally impossible subjects for the Indian college. The Indian liked Dickens, found something in Scott, and always cared for Shakespeare best of all. The educated Indian generally had a brain which was quite different from ours, but to underrate it was a common political mistake. The Indian among other things had a swiftness of temperament which instantly made him aware of how he was being treated.

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A COMPREHENSIVE programme of work of the various scientific departments under the Government of India for 1919-20 has been issued. It shows that the important work of the Geological Survey will be continued in Bihar and Orissa, the Central Provinces and Burma. Economic enquiries in wolfram and tea in Tennasserim, sulphur and chromite in Baluchistan and Seistan, and mica in Bihar and Orissa will be conducted. The scientific research work of the Survey of India will consist of gravimetric survey, atmospheric refraction, meteorology, magnetic survey and solar photography. Seventy-five permanently marked repeat stations in India, Burma, and Ceylon will be visited and observations will be taken at each to determine the annual changes in the magnetic elements for the period of 1915-20. Besides these, work will be done in various other directions, such as forest, botany, chemistry and zoology. The Agricultural Department has also drawn up a large programme of work.

SIR WILLIAM COLLINS, chairman of the University of London Graduates' Association, in proposing the toast of the association at the annual dinner last Friday, said that the association had grown and flourished through fifteen years of peace and five years of war, during which its principles and ideals in higher education had been triumphantly vindicated. But in time of peace the University of London had known no peace. For the last 30 years it had suffered from over-much attention at the hands of the Government and suffered under the intervention of constant commissions and committees. The association had consistently stood for the imperial, almost the international, scope of the University. It had stood for keeping the University free of all restrictive fetters of any kind whatsoever, for the high standard of degrees as proofs of acquired and assimilated knowledge, and for the democratic principle in university government. It aimed at securing for London as the chief city of the British Commonwealth the best teaching that the world possesses, free to develop on its own lines. He referred to the complete State control

exercised in German universities over governing bodies and professors alike, and emphasized the disastrous effects of such interference as exemplified in the recent war. They must remember that organization was only a means to an end and keep their eyes fixed on the moral ends and spiritual ideals which all learning should subserve.

Sir Philip Magnus, member for the University, said he recognized the difficulties which beset the University at the present time, but he firmly believed that London University was destined to become the greatest in the world. As an Imperial university it possessed within its constitution elements which would give it in the near future a position in advance of any other university. He referred to the great contribution made by students of the University during the war. In the work of reconstruction they would be no less successful. But they needed adequate resources to develop their educational work in accordance with existing demands. Mr. Fisher, in a recent lecture on "The Functions of Government in relation to Education," had realized the danger that some secondary school might cease to exist owing to the impossibility of competing with the State schools and their increased grants. Thus the freedom and variety of our secondary education, which has distinguished it from the State-supported system of Germany, would be lost. Nevertheless, Mr. Fisher evidently contemplated similar interference in the case of the universities. The University of London could not consent to the acceptance of grants upon conditions that might impede its free development along its own well-considered lines. "The intelligent co-operation of the universities is to be assisted by the pressure exercised by the distribution of Treasury grants." In its logical consequences this could not fail to remind them of the practice of the Prussian Government. To this pressure the association might be able to offer some resistance.

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IN connection with the question of Government grants to British universities, a Standing Committee to advise on and distribute such grants has been constituted. This committee will take the place of the Treasury, the Board of Education and Parliament so far as the distribution of grants is concerned. Three main points stand out conspicuously, namely, the large increase of grants to the universities which is necessary, (2) the institution of a single Board, such as the Standing Committee, to consider the needs of the British universities as a whole and (3) the method of distribution by which the individuality of each university will be given free play and its legislative autonomy safeguarded. These objects have now been attained. The annual grant has been raised to £1,000,000 and a non-recurring grant of £500,000 has been sanctioned to enable the universities to recover from the effects of the war. The old grants made by the Treasury,

the Board of Education and Parliament will now cease. These changes have effected a revolution for the better in the method of distributing grants to the British universities.

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WE welcome Mr. Henderson's appeal to the Government for a large and immediate increase in the Exchequer grants to universities and university colleges as an indication of the Labour Party's interest in higher education. Speaking as the Secretary of the Labour Party, Mr. Henderson says: "It is neither dignified nor consistent with democratic ideals that universities should wait, cap in hand, on the capricious generosity of private benefactors who may seek to impose their own views upon them." The Labour Party, says Mr. Henderson, "stands for a system of higher education which would free it from the financial barrier which at present excludes the vast majority of working class children, however capable," and has insisted that "the only test of admission to a university should be intelligence and character, not class or income." The suitable test for admission to any school or college assisted by the State, it will be agreed, is one of ability to profit duly by the advantages it offers, and this test should be applied impartially. (*London Journal of Education.*)

DR. SADLER, now Sir Michael Sadler, was formally welcomed home from India by Leeds University of which he is Vice-Chancellor. Naturally he spoke of his work in India as Chairman of the Calcutta University Commission. He said though the two countries were so extraordinarily different in many ways he had been deeply impressed with the fact that of all the educational matters discussed in Leeds University during the last four or five years, no single one had failed to come before the Bengal Commission. Not one judgment of an expert English statesman on education, not one bit of experience of the teachers of this country in science, technology, or the arts was wasted upon the Commission in discussing the educational problems of India. Before he went to India he thought it was at the other end of the world. It was really next door, and one of their chief duties was to make this country realize that it was next door. No one could be in India long without realizing what had been done for the country by the example and service of men from Oxford and Cambridge, from the Scottish universities, and from London, both in its older and newer form. He was impressed by the fact that the new universities—Birmingham, Manchester, Liverpool, Leeds, Sheffield, and Bristol, were becoming more and more influential in moulding the new ideas of higher education throughout India. Without any change in loyalty to the older experience, men throughout India were beginning to feel that in the new universities

they had hit upon a form of constitution which worked well in the modern State; that they had felt their way to a right relation to the central Government of the country; that they were right in being in great industrial centres; and in holding high the principle that for all, rich and poor, men and women, a liberal education was the essential thing for citizenship.

HERE is a scathing summary of the vices of the German university system. State-aided and State-controlled universities are on the increase everywhere. They are indispensable in spite of their manifold disadvantages, but may they never develop or even germinate the qualities here recounted! Addressing the University of London Graduates' Association at their recent annual dinner, Sir William Collins, the president, said the vices of the German universities which the last five years have exposed, and which we should shun as the devil, were as follows:—(1) The governing bodies have been the creatures of the State-made—State-controlled—the fine flower of official bureaucracy; (2) the professors, State-appointed and State-paid, have preached a State-worship; the sins of the proletariat have been great, but the sins of the professoriate have been greater; (3) the degrees of the universities were “practically the certificates of the professors themselves” without the healthy ventilation of an outside atmosphere secured by independent examinations and external examiners; (4) the medical faculty was an organization which tended to the commercialization of the profession—to the sacrifice of heart to head, where by solicitude for the sufferer tends to be reduced to the mere scientific investigation of clinical material.

IN his final despatch, dated March 21, in which he describes the advance of the British Forces to the Rhine, Sir Douglas Haig says:—

“Our universities and public schools throughout the Empire have proved once more, as they have proved time and again in the past, that in the formation of character, which is the root of discipline, they have no rivals. Not that universities and public schools enjoy a monopoly of the qualities which make good officers. The life of the British Empire generally has proved sound under the severest tests, and while giving men whom it is an honour for any officer to command, has furnished officers of the highest standard from all ranks of society and all quarters of the world. “Promotion has been entirely by merit, and the highest appointments were open to the humblest provided he had the necessary qualifications of character, skill, and knowledge. Many instances could be quoted of men who from civil or comparatively humble occupations have risen to important commands. A school-master, a lawyer, a taxicab driver, and an ex-Sergeant-Major have

commanded brigades; one editor has commanded a division, and another held successfully the position of Senior Staff Officer to a Regular Division; the under-cook of a Cambridge college, a clerk to the Metropolitan Water Board, an insurance clerk, an architect's assistant, and a police inspector became efficient General Staff officers."

THE British Branch of the American University Union in Europe entertained at dinner on Tuesday at the Connaught Rooms, 400 of the 2,000 American university students who formed part of the United States Army and who have been detached to study at British universities and institutions. Responding, the American Ambassador said it had been claimed, in fact the English boasted that their country had not been invaded since the successful Norman invasion of 1066. William the Conqueror or his Norman followers had been difficult to dislodge from the lands of which they possessed themselves. He wondered if many of those present would not leave this country richer than they had come. They had come to a very rich country, and if they desired they could fill their mental haversacks fuller than they could in any other country. They could trace the greatness of this old country from the land of Boadicea to Flanders and the Somme in the development of human progress, in liberty, and justice. No land was richer in architecture, art, medical science, and literature than England. In the past few years "Made in Germany" was supposed to be the finishing trade-mark of a complete education, but he held that the duty of a university was not merely to make scholars, but to make men useful citizens and high-minded patriots, and in this work it was not Bonn and Berlin that had the honour, but Oxford and Cambridge.

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SIR A. GEDDES, President of the Board of Trade, speaking at Glasgow University Club on the occasion of its holding its first dinner since the beginning of the war, said it was a danger that so few men whose minds had received a university training were helping to bear the burden of leadership. The whole danger at the present moment came from the fact that the leaders did not see life whole because they had never had the whole of life presented to them as only a university could present life. The graduates of the universities were the pilots who could steer the ship of civilization off the reefs.

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PRESIDING at the second sitting of the Education Conference at London in connection with the education of soldiers, Colonel Amery stated that their aim was to enable all facilities for learning in any

part of the Empire to be available to men in any other part of the Empire. A beginning had been made through the Rhodes scholarships, and the war had brought further developments. Colonel Amery pointed out that some Dominions were giving scholarships to their officers at the universities in England. The Board of Education was giving grants to men from any part of the Empire who served in the British forces, and the Board had decided to give ex-service men wishing to study at a university in the Dominions the same grant as if they studied in London or Oxford. Colonel Amery emphasised the value of such arrangements in giving a new outlook and wide vision, which were particularly valuable to men wishing to participate in public affairs.

MISS MAUD MARGARET GIBSON has placed in the hands of the Royal Society of Medicine a sum of money sufficient to provide a scholarship of the yearly value of about £250 for medical research by women, in memory of her father, the late Mr. William Gibson, of Melbourne, Australia. The scholarship will be awarded from time to time by the society to qualified medical women who are subjects of the British Empire, and is tenable for two years, but may, in special circumstances, be extended to a third year. The holder of the scholarship will be permitted to travel at her own will for the purpose of the research she has undertaken. There will be no competitive examination, nor need a thesis or other work be submitted. The society has power to terminate the grant if it has reason to be dissatisfied with the work and the conduct of the scholar.

MR. FISHER, President of the Board of Education, speaking at a meeting of the Women's Citizen Association at Ealing, said, "We have to work through human instruments, and no nation is well advised to allow its teaching profession to become discontented or unattractive to talent and devotion. The teaching profession is a disinterested profession, and there must always be a missionary spirit in the profession. I do not want it to be a highly-paid profession, but I want it to be adequately paid. There is no calling which makes such a constant and continuous demand upon high spirits as the calling of the teacher. A good teacher should flood a class-room with his vitality."

SCIENCE NOTES

Position of Science in the Educational System of a Country.—A Conference to direct attention to this subject was held at Westminster in April last under the auspices of the League for the Promotion of Science in Education. The chair was taken by Lord Leverhulme, who said that our system of education should take into the fullest possible consideration the means that science had placed at our disposal in the daily life and industries of the nation. Three resolutions were submitted to the Conference and carried unanimously. The first of these emphasised the importance of having an adequate representation of scientific men in all Government departments. Mr. Sanderson, the proposer of this resolution, deplored the lack of scientific outlook by Government officials. Sir Philip Magnus, M.P., in seconding this, emphasised the fact that the League did not in any way desire to favour scientific teaching at the expense of so-called humanistic studies. They wished, however, to encourage the adoption of the scientific method in all branches of learning. Mr. Charles Bright, in supporting the resolution, suggested that men of scientific and business experience might well be introduced into the *personnel* of Government departments. The second resolution, in calling for a pronouncement by the Government as to its attitude towards the recommendations of Sir J. J. Thomson's report, criticised the lack of scientific knowledge of members of Parliament in matters of general education. Lord Headley seconded this resolution and attributed the indifference to matters of this nature, to the lack of scientific education, which alone could produce action and organising ability. The third resolution was proposed by Dr. H. B. Gray who, in a forceful speech, expressed the view that the present public school and university system failed to produce that activity of mind and breadth of knowledge which were necessary for dealing satisfactorily with modern problems.—*Nature*.

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Tea from Lantana.—The April number of the *Journal of the Indian Institute of Science* contains a detailed account of the experimental investigations carried out at the Institute by Mr. Jal D. Edal Behram, B.Sc., on the leaves of lantana, with a view to determine the possibility of utilizing it as a tea substitute.

An infusion of lantana is said to be used in the Brazils as a substitute for tea. This fact and some preliminary investigations already made in this connection by Mr. Kanga led Mr. Behram to investigate the subject carefully with a view to identifying and studying the enzymes of the lantana and comparing them with those present in the tea leaf.

The author states that his experiments are by no means exhaustive, but his investigation would lead to the conclusion that although from the leaves of the lantana a product similar to ordinary tea cannot be obtained, yet a tea substitute could be made at an exceedingly cheap price. As regards the question of flavour, which is of the first importance from the tea consumer's point of view, it appears that the major portion of the unpleasant essential oil escapes during the process of manufacture, especially in firing, so that in the final product only a slight smell, not at all unpleasant, is left.

The author is hopeful that further study of the subject may reveal a method of profitably utilizing a plant now generally considered to be an agricultural nuisance.

Louse, the Enemy of Man.—Until the great world war nobody ever mentioned the louse in polite society. It is not merely an annoyance; it is a frightful menace, inasmuch as the spread of typhus, the most destructive enemy of mankind, is attributed to it. With inadequate sanitation arrives a plague of lice, which carry and spread typhus so that it soon becomes epidemic, wiping out whole populations. Thus it has ever been since prehistoric times. Accompanying and following every war, has been a scourge of typhus, decimating armies and destroying non-combatants on a wholesale scale.

Bubonic plague and cholera, though terrible in themselves, are not to be compared to typhus as a killer. Epidemic typhus such as has been raging in Russia, Siberia, Bulgaria and other European countries for a long time past, kills four out of every five persons it attacks.

The louse is merely the *carrier* of the disease; its mere presence does not connote an attack of typhus, but it does indicate that cleanliness has been lacking somewhere and that there is likely to be danger. The eggs, or nits, of the insect are glued to the human hairs so firmly that, without precaution, they will stay there and hatch out for a certainty.

The germs of typhus are not only communicated by the bite of the louse (as those of plague, by the rat-flea, or of malaria, by the anopheles mosquito) but through the medium of the insects' excreta, which find their way into the tiny wound its bite makes, or are rubbed into the wound by the victim's scratching.

The louse has a curious habit of devouring the excreta of other lice. This would be highly beneficial were it not that, according to the now accepted theory, the germs contained in the excreta acquire added virulence every time they pass through the body of a fresh louse.

The following definite new facts have been developed by recent scientific study of the "body louse":—

(1) It is the sole carrier and distributor of the bacillus that engenders typhus. (2) It also carries and distributes "relapsing fever," the germ of which has been discovered and identified, and also "trench fever."

The louse was probably the earliest companion and parasite of man; it cannot exist without him, who is its only "host." Newly-hatched, it will die in twenty four hours, if deprived of human blood. Arrived at adult age, it cannot survive more than ten days without this article of diet.

This pestiferous insect species is extraordinarily delicate. Slight changes of temperature are fatal to it. If an infested person is attacked by fever it will promptly desert him. A dead person is quickly abandoned by lice.

It is quite regular in its habits, taking three meals a day. Twenty minutes are devoted to each meal, the insect inserting its beak and sucking blood. Its rate of reproduction is most appalling.

Why the fighting men should be so universally afflicted with this pest is easily explained, as in the formation and mobilisation of conscripted armies, all sorts of men, drawn from every rank of life are thrown together—crowded together in camps, in barracks and in the trenches. Some of them are bound to be infested and the parasites they carry are quickly passed along to their fellows.

Cleanliness is the only preventive of this pest. The "cure" is to bake all infested clothing and boil all underlinen. Vinegar makes a good solvent for the eggs. Paraffin is a good insecticide for after-application, but better still is a lotion of carbolic acid (1 in 40 of water). The assistance of the toothcomb is always desirable.

As has been already stated, the mere presence of lice needs cause no alarm, particularly if the person be healthy; but caution is called for in view of what recent medical practice has revealed to us.—*Popular Science Siftings.*

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An Indian Boy Chemist.—News comes from Bombay of some remarkable chemical discoveries by a seventeen year old Indian lad by name, Mr. E. E. Dutt—discoveries which are expected to revolutionize the industrial development of India in the near future. This precocious youth, who has not had a school or college education at all in the accepted sense of the term, has discovered that marsh gas

may be prepared synthetically anywhere. This gas is of great use for industrial purposes as motive power.

This discovery was made in the Central Provinces a couple of years ago, when the Germans were developing some of their most fiendish methods of warfare. At the request of His Majesty's Government in Great Britain, who became acquainted with this discovery when the lad applied for a patent, it had to be kept a profound secret during the war lest the Germans heard of it and put it into capital use against the Allies.

Young Dutt has, in addition, discovered and patented methods and processes by which pure sulphur can be manufactured from gypsum (sulphate of lime) which is plentiful in Rajputana and in the North-West Frontier Provinces, in Kalabagh and in Sind. The significance of this achievement cannot be over-rated, as a chief supply of sulphuric acid is the key to many new industries in India, and in the manufacture of which sulphur is the most important ingredient.

The youth has also found out simple and cheap methods of manufacturing carbonate of soda and alumina, and an equally cheap process of extracting potash from ordinary rocks in India. As a fertiliser, potash is largely used in Europe and America, which till now are practically dependent on Germany for their supply of this article. It seems possible that by this discovery India would, at no distant date, be able to compete successfully with Germany so far as potash is concerned.

Mr. Dutt has been carrying on demonstrations in Bombay for the past few months, and it is understood that so far, it has been conclusively proved that his discoveries can be worked out on a commercial basis. A strong syndicate of leading industrialists of Bombay has acquired the patent rights from Mr. Dutt for the manufacture of sulphur, potash, soda, &c. On the completion of the demonstrations, a company with a capital of about two crores of rupees is to be formed to undertake the manufacture of these chemicals.

Young Dutt is the eldest son of Mr. P. C. Dutt, Bar-at-Law, who is a well known industrialist of Jubbulpore. Mr. P. C. Dutt is no chemist and never read a word of chemistry. Young Dutt is a vegetarian in spite of his long residence in Europe, chiefly in London. He leaves India in September next for a tour in Japan, America and England to demonstrate his discoveries of extracting potash from felspar.

Mr. E. E. Dutt has secured a number of patents for processes of manufacturing sodium and potassium carbonates, sodium and potassium aluminates, aluminium, magnesium, calcium and potassium chlorides, potassium sulphate, potassium salts from silicate minerals, manganese dioxide, manganese, magnesia, and for the synthetic production of methane.—*The Modern Review* for July, 1919.

COLLEGE NOTES

THE MAHARAJA'S COLLEGE

THE last number of the University Magazine recorded our doings up to February, 1919. March is sacred to the god of Examinations, and that rather exacting deity claimed the homage of both the staff and the students for the whole of that month, and even well in to the beginning of April. The second week of April ushered in the "Long Vacation" or, as it is otherwise called, "The Summer Vacation." Both the terms are unsatisfactory. As for the first expression, we challenge any one to convince us that it is long enough to deserve the name. The second expression is a misnomer, since the holidays commence after we have received the worst of the heat that Mysore summer has to give us. But here we must stop. It would be rank heresy to try to discover the *raison d'être* of such long-established institutions as the "Vacations." We may, at best, succeed in proving them to involve some anomaly; but, as a member of the British Parliament assured Matthew Arnold, "that a thing is an anomaly is no objection to it."

July has come to us bringing with it a number of fresh and hopeful faces to the College. It is very encouraging to note that athletics has taken the lead in the activities of this year. In the cricket match arranged between the freshmen and Old Boys, the freshmen scored 108 runs as against the 98 of the latter. Cricket is becoming popular and the two teams are under the captaincy of Mr. Ananda. Football is under the management of Mr. Kempanna, our popular and able player. The Third Year Men challenged the rest of the College and the first day's game ended in a draw, each party scoring two goals. There seems to be much of sportive enthusiasm in the Third Year class, for they challenged the rest of the College in a hockey contest also. This game is maintaining the old level of excellence under the guidance of Mr. Sree Ramulu. Tennis has a good account to give of itself. There are three crowded courts running; and another small one is to be shortly opened for the "American Volley Ball." The game is under the supervision of Mr. Mahomed Hussain.

It is very gratifying to know that the Physical Culture Scheme is beginning to be realised. We congratulate the College on the whole-time appointment of Mr. H. Krishna Rao, M.A., as Director. Under him and the important Committee of some of the members of

the staff and a few outside gentlemen, the scheme of Physical Culture will develop rapidly. The Committee met last month for the first time and passed, among others, the following resolutions:—(1) That the services of the Medical Officer in charge of the Hostel should be utilised for medical inspection of the students. (2) That the following members of the Committee should interest themselves in the branch of athletics mentioned against their names and co-operate with the Director :

<i>Cricket</i>	...	Mr. J. C. Rollo
<i>Hockey</i>	...	„ A. B. Mackintosh
<i>Foot-Ball</i>	...	„ B. R. Krishnamachar
<i>Fencing, etc.</i>	... i	„ M. P. Subramanyaraj Urs
„	... ii	„ D. Srinivasa Char
<i>Tennis</i>	... 1	„ K. T. Shah
„	... 11	„ S. V. Krishnaswamy Iyengar

No account of the College activities would be complete without a mention of our “Co-operative Society” which is doing much useful work in an unobtrusive manner. Last year's sales amounted to Rs. 2,500 (not annas, as stated by the Magazine). The progress in the business of the Society may be gauged from the fact that in the single month of July, the sales have gone up to Rs. 2,400. One hundred more shares have been subscribed for. It would be a proud thing if all the needs of the College as regards books, stationery, could be met by the Society.

Peace Day (July 19th) was celebrated at the College at 8 a.m. The new lecture theatre was packed with students. The Vice-Chancellor (who presided), Mr. R. H. Campbell and Mr. Thos. Denham addressed the students, and each speaker, as it happened, took a special aspect of the War as his theme. References to the birth of a Mysore Prince on the Eve of Peace were received with the greatest enthusiasm.

C. R. N.

THE CENTRAL COLLEGE

TENNIS is continuing to be a very popular game amongst the students and the staff. Three courts were run the whole of last year and they accommodated about 45 members. Many applicants were refused admission for want of more tennis courts. It would have been very difficult to run the courts due to high price of tennis balls, sometimes Rs. 22/8 per doz., and the difficulty of securing pickers, but for the kindness of the University Council in sanctioning a grant of Rs. 2,000 for sports and athletics in general for 1918-19. Only a few matches were therefore played with clubs in Bangalore.

We had with us last year Mr. R. S. Raja Iyer who was also the assistant secretary of the Club. He may be regarded as one of the

best players in tennis; he won the championship at Mysore in the Dasara Tournament and also the South Indian Championship at Salem. There are at present a few students in the college who will probably come to the same high level of play in a year or two. We went out to play at Shimoga and have to express our best thanks to Mr. M. A. Narayana Iyengar, the Deputy Commissioner, the Special Malnad Officer, some of the leading advocates and the Headmaster of the Collegiate High School for the many acts of kindness we received at their hands. But our tour to Mysore was not a pleasant one, due to the nasty epidemic of Influenza. A handicap tournament was held last year and Mr. Rama Iyer was declared the winner. The Tournament was as usual followed by Socials, a moonlight dinner being given to the members and their friends. I am pleased to say that the student members continued to be enthusiastic and earnest about the game, and three of these were on the managing committee, consisting of four members. The club owes its successful close for 1918-19 to the kind help of Mr. Metcalfe, who as usual, was very generous in his contributions towards the finances of the club, and who was also taking a very keen interest in its welfare; and also to a few other professors, especially Mr. M. G. Srinivasa Rao.

M. SESHAIYENGAR,
Hon. Secretary, Tennis Club.

The last meeting of the Central College Physical Sciences Club was held on 13th February, 1919, when Mr. C. K. Sundarachar, B.A. (Hons.), Demonstrator, Central College, read a paper on "The disintegration of radio-active elements." It was an interesting discourse copiously illustrated with lantern slides. Before the year closed, there was a "social gathering" of the members in the month of March, when an interesting and instructive lecture was delivered by Mr. A. K. Yegnanarayana Iyer, M.A., N.D.D., F.C.S., Deputy Director of Agriculture in Mysore, on "The Science of Dairy-Farming." Our thanks are specially due to the members of the college staff who spared no pains in contributing to the success of the club as a whole.

THE HON. SECRETARY.

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COLLEGE OF ENGINEERING.

The institution entered upon its third year of existence July last when the special classes in Civil and Mechanical Engineering were formed, the starting of the Electrical Engineering class having been postponed owing to the difficulty of providing equipment. The College now contains 114 students in all, and has grown into a very useful and promising institution. The first batch of 48 students

appeared for the Intermediate Examination in Engineering, and of these 34 were successful, 4 being placed in first class. Some of the outside examiners expressed a high opinion of the students examined. The Government and the University are doing everything possible to develop the College by liberal schemes of scholarships and freeships. In addition to such helps, six appointments in the Mysore Service have also been guaranteed (three for the Civil, two for the Mechanical and one for the Electrical branches of Engineering) for three years in the first instance to the best students taking the Degree in Engineering. The continued pressure for admission to the College shows also the growing desire on the part of Indian youths for technical education. One full-time Professor (Mr. S. Raghavendra Rao) and an Assistant Professor of Mechanical Engineering, both with foreign training, were appointed recently, and an additional Assistant Professor of Civil Engineering is also expected to join the College shortly. Nearly 60,000/- has already been spent on equipment, and special mechanical equipment is being provided for in addition to the use of the workshop of the Mechanical Engineering School and the science laboratories of the Central College. The College building is being extended at a cost of nearly Rs. 50,000/- The Engineering Association of the students, sports and athletics and other activities are receiving attention, and require time and further facilities for satisfactory development. Students of the College began work this year by visits to the Krishnarajasagara Works and other important building works in Mysore, and they were engaged on surveying practice of various kinds in the month of July.

THE MAHARANI'S COLLEGE.

THE year 1919-20 has begun brightly and brought many changes for the college. The results of the Entrance class were very satisfactory as four out of five students have joined the First Year B.A. Four students from our High-school and two new pupils from districts make up the Entrance Class. The college has been entirely separated from the High School, and soon it is hoped that we shall have a building to ourselves. We are not yet a self-sufficing unit, for our library is still small and our staff of professors not quite complete.

At a general meeting it was decided that new Secretaries were to be appointed for the college Debating Society and the Games' Club. A proposal was also made to increase the Reading Room subscription so that more magazines could be circulated. It is sincerely hoped that with the co-operation of the principal and the professors, the social activities of the college will make rapid progress.

Just before the College closed for the mid-summer vacation, the Debating Society met. The High School and College classes united for the last time under the double supervision of Sri K. D. Rukmini-amma and Mrs. Hensman. The question of the day was "Should vernaculars be the medium of instruction for women?" We enjoyed ourselves immensely listening to the variety of opinions for and against. The meeting was brought to a close with a resolution passed by the majority against the proposal.

With regard to the Games' Club there is little to say; with the exception of a few, all the college girls play tennis and badminton. In the Reading Room we see greater activity; during the leisure hours one sees a group of girls poring over the magazines or turning over the pages of the illustrated magazines. We are quite pleased to find that the college girls have been able to secure a cosy nook for themselves.

Now that the college has got a firm footing and that we have a few lady professors to ourselves, we hope to do great things.

A THIRD YEAR STUDENT.

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Extract from the Report of the Calcutta University Commission :—

One outstanding instance of a new type of university appealing to local patriotism is presented by the University of Mysore, which includes the colleges at Mysore and Bangalore, the former devoted to arts, and the latter to science, teaching. We visited Mysore and Bangalore at the invitation of His Highness the Maharaja of Mysore and discussed the future of the new University not only with His Highness, but also with the Diwan, the Vice-Chancellor, the Registrar and the members of the teaching staff. The movement for the creation of the new university originated in a healthy desire to break new ground, especially in two directions. In the first place, the work of the first year of the old college course is to be conducted in a few specially selected high schools. In the second place, though to the regret of some of the founders, it was not found possible to establish the University in a single seat, collegiate instruction, instead of being widely dispersed, is concentrated in Mysore and Bangalore. The question whether these centres should ultimately form two separate universities being left to future experience to decide. We believe that the foundations of the new university have been truly laid and that school boys and college students alike will benefit by the new departure.

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Contributions and books for review should be forwarded to the Editor, MR. J. C. ROLLO, Maharaja's College, Mysore.



REV DR W SKINNER, C.I.E.,
Retired Principal, Christian College, Madras.

THE MYSORE UNIVERSITY MAGAZINE.

NOVEMBER 1919.

EDITORIAL.

MR. DENHAM, who, with the August number, relinquished the editorship of this Magazine, is fortunately, still with us and has made a particularly valuable contribution to this issue. In his conduct of the Magazine from its commencement, he has set a standard which it will be no light task to maintain.

CONVOCATION.—In the Magazine for November 1918 Mr. Denham described the first Convocation of the University. The ceremonial of this year was essentially the same and need not here be described. One interesting new feature, however, was the appearance, for the first time, of the mace, which was borne by the Principal of the Central College, the excellent English custom being thus established of regarding the office of mace-bearer not as a menial office (as is usual in India), but as one of honour.—Reference must be made to the addresses of the Vice-Chancellor and Sir Abdur Rahim. Both are documents of exceptional interest. The Vice-Chancellor contrived to give, within the limits of a brief speech, a very definite idea of the nature of the progress made during the year, and of the promise of the immediate future. But in concluding he forsook the region of statistics, and, by a striking coincidence, his final words insisted on precisely the same idea which was to be the central theme of Sir Abdur Rahim's address. A new university must for long be the object of persistent criticism from outside, as well as of candid and unflinching self-criticism; and both are for its good. To one form of criticism, however, to which the Vice-Chancellor referred, he made what seems to be an entirely conclusive

answer. This university has been criticised, he said, as "containing no element of Indian culture such as one could expect in an Indian State." Much might be said of what the University has done, and has planned to do, in the fostering of oriental studies; but the Vice-Chancellor contented himself with a quietly but convincingly justified rejection of the vague, ill-informed and ill-reasoned demands that are sometimes made of an Indian University by those who disparage western culture. He agreed, of course, as to the necessity of "guarding scrupulously all the invaluable stores of knowledge we have inherited from the past," avoiding imitation of the feeble and unintelligent kind, and employing the greatest possible energy in research and in the attempt to co-ordinate "our national literature and monuments of past culture" with "present ideas and needs"; and he asserted the ambition of the Mysore University to serve in this sphere. But he insisted that "we should not lose sight of the fact that there are whole departments of knowledge and learning which either did not exist or were very backward in our own country, and that it is impossible to preserve our position, not to speak of advancing to higher rank, among the nations of the world, unless we assimilate much of what western savants and scientists have peculiarly made their own." And there could be no clearer exposure of a constantly lurking fallacy than this,— "In most things of knowledge that matter, there can be no nationalism. There is not one mode of culture and one system of knowledge for India and a different method and system for England. Language is merely the vehicle of thought, and learning and research do not become undesirable exotics when they are clothed in other languages than our own."

This was the key-note also of Sir Abdur Rahim's address. His main idea was this—that the chief function of present day education in India must be to cultivate the faculties of leadership, of organisation, of co-operation, and the use of these faculties for social service. To the absence of these was to be attributed, in greatest part, "the country's weakness and misery." "There are few among us," he said, "who make serious endeavours to organise the people for useful social service on any large scale." And such efforts as had been made had shown comparatively little result. Education must solve this problem. "It should be a distinct and direct aim of the educational institutions to train students in the art and methods of organisation and co-operation. We could do with a great deal less of smartness." And he goes on to remark (and it is here that his speech comes in direct contact with that of the Vice-Chancellor) that "the most serious obstacle in the way of reforms is a certain attitude of complacency and satisfaction

with the existing order of things as we have inherited it from the past." He finds an interesting *reductio ad absurdum* for the argument "that our ancestors were great men, greater than the best men of the present day, and therefore whatever they practised or sanctioned is good enough and cannot be improved upon." Referring to the great men who, in the days of Elizabeth, produced the noblest works of genius or "showed the way of that commercial and colonial enterprise which led to the foundation of the British Empire," he says,—“I doubt if there are any sane Englishmen who would like on that account to take to sedan chairs and stage coaches in substitution for motor cars, railways and aeroplanes, or to the Elizabethan ideal of social life in which the gentleman, devoted to ballad and sonnet making, to duels and cock-fighting, was the only person worthy of consideration.” A prime instrument of reform and progress is imitation, in the best sense, of that which is excellent in the west,—its “modern arts, sciences, and appliances of life” and those western “ideas and thoughts” which will transform baneful custom. Changes must not be forced or over-hasty, but “the goal must be kept steadily in view.”—Such are the thoughts of one who combines the deepest reverence for tradition with a passionate longing for the uplift of the people, for the annihilating of avoidable misery, for the uniting of all classes of men. Such is his view of the function of education: it must train men for this task, and it cannot do so unless it rid itself of all prejudice. And the tone of Sir Abdur Rahim’s special message to the graduates of the year was precisely the same. It was a noble exhortation, totally devoid of rhetoric, as was the whole of the speech,—plain and finely chosen words, governed by earnest purpose. One very simple sentence might well be graven on their hearts, and not on theirs alone,—“You should always remember that it is as much your duty to render some direct service to society as to earn your own living.”

Certain other points in Sir Abdur Rahim’s address are of peculiar interest. He prophesied that the development of the Mysore University would be on scientific and technical lines. That, he remarked, was the modern tendency of all universities, but was particularly desirable, and feasible, in Mysore, with its great natural resources, its industrial possibilities, and a government definitely concentrating its energies on industrial expansion.—Again, he made an interesting reference to “what is called the literary or humane side of education.” At a time when the insistence of the Calcutta University Commission that education in this country has leant far too much to the literary side may be misinterpreted in a manner prejudicial to

certain studies that are absolutely essential to education in an arts course, as distinguished from technical or professional training, the following sentence, which in its context reveals the speaker's view of the essential value of humanistic studies, is of some importance,—“While the inculcation of useful knowledge and the training of intellect must always be kept in view at every distinct stage of the educational course, the building up of a strong character, the cultivation of the finer sympathies and imagination and of noble aspirations must be regarded as an essential function of every sound system of liberal education.” These words may be commended to the attention of those who hold that the single object of a college course is the provision of “knowledge.”—Sir Abdur Rahim made several references to the report of the Calcutta University Commission. In this connection, he urged the co-ordination of elementary, secondary and university education, and the most careful and discriminating encouragement, by means of scholarships, from the lowest to the highest stage, of promising students. As he remarked, this necessity has been fully recognised by the Mysore Government. Again in consonance with the report of the Commission, he urged that the secondary course should in itself be adequate to the production of “cultured, resourceful and patriotic citizens of the State, useful to themselves and to society.” He deprecated the fixing of a minimum age for the securing of the certificate of completion of the secondary course. Pointing out the necessity for an adequate supply of efficient teachers, he remarked,—“It is a most deplorable fact that the value of men into whose hands is entrusted the training of the future generation should so often be assessed at starvation wages, in the lower grades even inferior to those of factory and mill hands.” And the following more general sentence met with much approval in an academic gathering,—“The educational service should be at least as well as paid as any other service, and it should be assured as honoured a status.”—He referred at some length to the question of the medium of instruction in secondary education, expressing the opinion that “not one of the vernaculars of the country is yet fitted to be the medium of higher instruction,” and that the idea that English can never form a proper medium of highest expression for an Indian is “contrary to patent facts.” There is no more complex problem of education than this, and no doubt some of those present would fain have debated the matter with him. But the remarks made in his address, together with the evidence given by him to the Calcutta Commission, are among the most important documents to be considered by those who are tackling this problem.—Another important

reference was to the necessity of giving equal educational opportunities to all communities and castes. This, as Sir Abdur Rahim said, is "an integral part of the general policy" of the Mysore State. "The attitude of His Highness the Maharaja," he remarked, "has in this respect been inspired by the highest wisdom," and he gave particular expression, on behalf of the Mahomedans of the State, to "their sense of grateful appreciation of the anxiety of His Highness and his Government to help them to win for themselves a position in which by their steadfast loyalty and devotion they can render services of value to the State." And the following words of wise caution are characteristic of an address so impartial and so broad of view,—“At the same time the State would itself be a heavy loser if it failed to encourage intrinsic worth or talent simply because it happens to be more common in one community than in another.”

Few Convocation addresses have combined such individuality with such moderation of view, and such restraint with such impressiveness.

THE SENATE MEETING.—As usual the meeting of the Senate lasted over two days. "Manuscript eloquence," as ever, was much in evidence. The speeches so delivered were of marked interest, but we venture to suggest that this practice should, as far as possible, be discontinued. No doubt there are cases in which the necessity of extremely cautious wording, and the guarding against any sort of misinterpretation, are partial justification; but we can remember no case, in this meeting or in that of March, where the circumstances were such. Sometimes speeches are written with a view to publication; and it is quite unfair to the Senate that this personal purpose should impose upon the senate the delay and tedium resulting from a long written dissertation. And if a senator writes because he feels his inability to speak, he may be assured that the senate would greatly prefer halting words, arising out of the debate in progress, to such a prepared thesis as is quite unresponsive to other people's opinions and interrupts the process of debate. The mover of a resolution has greater justification, but he would do himself more justice, and make a greater impression, were he really to *address* the Senate. These animadversions do not, of course, apply to lady senators. But indeed it was a lady senator who, in this meeting, set the best example of debate. Surely the conciseness, the appositeness, the force of Miss Butler's remarkable speech will render it impossible, in future, for the male

senator to forsake debate for dissertation,—pleading inferiority. There is no personal reference here; we seek the abolition of a growing custom.

To expedite business, subjects presumed to be non-contentious were taken first. Unfortunately, that which tends least towards contention may tend most towards eloquence; and, further, contention sometimes appears where it is least expected. Contention, for example, appeared in one case where the mover of a resolution cordially recommended its rejection. And sober common-sense was not infrequently heard, from the centre of the hall, demanding that the more volatile sort should stop “wasting the time of the Senate,” “making fools of the Senate.” Let not this be a disparagement of our senate in the eyes of those outside the State. Members of other universities in India know their own senates, and they will not cast stones. Nor can it be denied that the proceedings, on the whole, were both dignified and business-like; and, as usual, they were totally free from animosity—a remarkable thing, for there was frequently the greatest possible difference of opinion.

To some of the more important decisions reference may be made.—The proposal that had occasioned most feeling and agitation was that of Mr. M. C. Rangiar—“That the medium of instruction for girls in all stages of instruction should be mainly vernacular.” The word “mainly,” of course, could be so pressed as to render the motion meaningless; but no doubt it was intended simply to leave room for the teaching of English itself (and possibly mathematics, according to the idea of the Calcutta University Commission) through the medium of English. The chief underlying idea was that girls leave school, as a rule, so early that the object of their school-training is not so much preparation for higher study as the getting as much must be possible out of their short school-time, and that this can be done only by such saving of time and labour as the adoption of the vernacular medium was held to promise. But there were not wanting among Mr. Rangiar’s supporters those who contended that the *experiment* of instruction through the vernacular should first be tried upon girls because they were comparatively few in number—a contention viewed with natural indignation, particularly by women themselves. The opinion of the women of the state, so far as it is articulate, was strongly against the motion. A few days before, the Ladies’ Conference in Mysore had unanimously passed a resolution condemning it. In the Senate, both the general question of education through vernaculars and the particular question of introducing the scheme into women’s education first, were canvassed at some length. The first was not up for decision, but as regards the

second a very definite and striking decision was given, the motion being negatived by 31 votes to 6. There was felt to be peculiar cogency in the arguments of the two lady senators, Sri K. D. Rukminiamma and Miss Butler, both of whom viewed the proposal with the utmost dismay. Differentiation was generally felt to be unfair (*not*, as was suggested in a wonderful article in a newspaper of the previous evening, a carrying out of the beneficent differentiating design of the Creator, hailed as protagonist of the scheme!); and there was no reply to Miss Butler's assertion, based on knowledge much more intimate than that of men-senators, that girls did, in ever-increasing numbers, desire university and professional training, that by its attainment they would render increasing service to their country, that the proposal would form a barrier against this, and that, were this barrier erected, their present practice of preferring outside schools and colleges would not diminish, but increase.

An interesting proposal was that of Mr. Venkatanaranappa, that, "in view of the report of the Calcutta University Commission condemning the present system of secondary education in relation to the Universities," Government should be requested to appoint a Commission to report upon primary and secondary education. Mr. Venkatanaranappa yielded to the loudly voiced request that he should not read the whole of an enormous thesis upon the subject, but the parts which he did read, particularly those in which he recorded the results of his explorations in a particular school, were both interesting and in the highest degree amusing. Not the least amused auditor was the Inspector General of Education, who professed himself very largely in agreement with the speaker's criticisms of the present state of things. The question was raised whether secondary education came within the purview of the Senate; and it was ruled, and generally agreed, that in view of the very close relationship between secondary and university education, Mr. Venkatanaranappa's motion did not stretch the function of the university body too far. It was also urged, no doubt with some cogency, that such a proposal should not be made when Government was already engaged in re-casting the school system, and, of course, had the Calcutta Commission's report before it; but the Senate were attracted by Mr. Venkatanaranappa's idea, and his motion was carried by a large majority.

At the meeting of October 1918, the Senate had, by a very narrow majority, recommended the adoption of the system of compartmental passes in the Entrance examination. This decision had been vetoed by Government. At the present meeting, Mr. Reddy moved that

Government might be requested to reconsider this decision. The proposal met with uncompromising opposition from a number of speakers, including two retired Inspectors General of Education. It was contended that such a rule would be bad for the reputation of the University, and bad for the students, who, it was urged, would be inclined to waste the spare time thus secured them. Mr. Reddy made an eloquent reply, stating the conviction that the change was sure to come, affirming that students of the present day had a greater sense of responsibility, and were more effectively controlled by parents, than those of the past, and pleading the difficulty of accommodating those who had failed and must, at present, repeat their attendance in all subjects. The motion was rejected by a large majority—a striking change from last year.

One of the most important matters for consideration was the report of the Senate Committee formed to discuss the remodelling of degree courses in general, and in particular the changing of the B.A. degree in science into a B.Sc. degree. The main point at issue was whether honours courses should begin at the same stage as the pass-courses, or should be post-graduate; and gradually discussion centred upon the question as to whether science and other courses should be differentiated in this respect. It was decided to refer the whole matter back to the committee, for a fuller discussion of this last point.

This and a number of other deferred subjects will come before the Senate at a supplementary meeting to be held at an early date. Among the most important of the deferred subjects are the proposed tripartition of the B.A. degree, and the institution, in the University, of courses in Education.

THE TUTORIAL SYSTEM.—It is salutary, as the University develops in different directions, to recur from time to time to the Draft Scheme, which sketches the policy that must guide us for many years to come. That scheme contains a paragraph headed “tutorial work,” in which the following sentences occur.—“The introduction of the tutorial system will be another special feature of the University. The University lectures will be delivered to large classes, in some cases, of over one hundred students. What is understood by class teaching is difficult, even if desirable, in such circumstances. . . . Such lectures need supplementing in many cases by the teaching of tutors to comparatively small classes; and the appointment of young, able graduates as tutors for this purpose is contemplated by this scheme. . . . Work in the case

of the arts students will be done in the library under the supervision of tutors and professors, whose object will be to guide the young student into the methods of research and independent work." This idea is essential to the idea of the University, and yet it has been impossible, so far, to carry it out. The tutorial question, here as in all Indian Universities is exceedingly difficult and complicated, though in a small University like this it will no doubt be possible to solve it. As is suggested by the sentences which we have quoted, tutorial work is to be done by two classes of people, the professors and assistant professors, and the tutors.—It is, moreover, of several different kinds. There is, first, the supervision of students with reference to their life in general, particularly in the case of those whose homes are not in the city in which they attend college. Each student must be in the charge of a professor or assistant professor, whom he may consult at will, and who is, in a sense, responsible for him. Secondly, there is the kind of tutorial work specially contemplated in the scheme—the supplementing of lectures by individual guidance, particularly in regard to reading. And thirdly, there is the correction of essays, and, particularly, the careful training of each individual student in the exigencies of the English language. The result of a consistent attempt in the Maharaja's College to carry out the idea of the scheme is as follows.—Every student in the college is assigned to a particular professor or assistant professor, who is his tutor. Thus each of these members of the staff has something like forty students to look after in a special sense. Each is assigned two hours per week for meeting with these students, and each has his own system. Some meet the students individually, which means that such meetings either are very short or occur at long intervals, but that the closest individual attention can be given. Some meet several students at once and can therefore see more of them, and perhaps with almost as satisfactory attention to the individual. Some use these meetings for the extension of class-work or the returning of corrected essays, while some spend the time in informal conversation on whatever subjects the students care to bring up. Library classes are rendered practically impossible by the number of the students, the difficulty of providing an adequate supply of books, and time-table difficulties. The students' time-table has no room for them, and indeed it is with some difficulty that arrangements are made for tutorial interviews at considerable intervals, and some of the tutors have had to make use of Saturday mornings for this purpose. This work, however, has had excellent results. It has certainly brought staff and students closer together, besides benefiting the students in relation to

their studies. As for the work done by tutors appointed as such, that is practically confined to the correction of essays, which, as far as is possible, are returned to students individually, with verbal comment. The English department affords the most convenient illustration. There are two tutors, who, at the same time are students of the M.A. class. These correct the compositions of all three B.A. classes, except for a small number of essays corrected by the professors themselves and returned by them, with comment, either in professorial classes or during tutorial periods. There being something like four hundred students to deal with, verbal comment is limited, on each occasion of essay writing, to a comparatively small number of essays. The tutors are carefully selected men, and do the work well.

Now it is difficult to see how, so far as professorial tuition, and tuition in the sense of guardianship, are concerned, the system could be bettered without an enlargement of the staff. The utmost liberty is given, and it may fairly be left to the conscience of each professor to do the best he can, in every sphere, for the students assigned him. But the other part of the system is inadequate; sufficient individual training in the use of the English language is not given. The importance of such training cannot be exaggerated. The graduate's fitness for his life's work is determined, in very large measure, by the degree of his mastery over the English language. It is so in Government service and in most professions; and it is particularly so in that profession to which so many of our men are destined—the teaching profession. Now those who inspect schools are constantly taken aback by the fact that even particularly able teachers, and even lecturers to classes preparing for the Entrance examination, are very far from immune from errors both of grammar and of idiom. Even in the year before entering the University, students listen daily to un-English constructions, not to speak of un-English pronunciation, from those who are their guides in the English language. We must see to it, and we certainly can see to it, that the men who are to be teachers do obtain an adequate knowledge of the language. And at the same point another argument emerges. The schoolboy is handicapped by the bad example of his master. He is handicapped also by the fact that English grammar is almost totally neglected in schools. No-one who has not valued Entrance examination papers can have the slightest idea of the "English" employed by the average candidate, and of the constant errors that mar the work of the best. These students, in this condition, enter college. We are not lenient in admitting them. Their attainments are quite up to those of students at the corresponding stage in

other Indian Universities. But, to speak plainly, they simply do not know the English language, just as intermediate students in Madras do not know the English language. It is not their fault. They have, as a rule, the faculty for language, and they could become proficient were they given a chance. In college we must take them as we find them, and though this study is much more difficult for them than it would have been during their school-days—the proper time for it—they can be so trained in college as really to master the language. It is only through persistent and detailed attention to the composition work of each student that this can be done. And two part-time tutors cannot do it. It is very doubtful whether it could be done even by increasing the number of tutors of the present kind. Very few students of the M.A. classes are fit for the work, and they, of course, are much occupied with their M.A. work. It must be remembered that particular qualifications (and those not merely intellectual) are required for this task. The tutor in English must not himself be liable to slips in grammar or idiom. How many of our graduates escape this liability? The competent tutor in English must be a graduate of distinction, and such a tutor cannot be obtained—still less can he be kept—without fair financial prospects. To sum up, then, one of the most pressing needs of our students is personal tuition, weekly, in the English language; a considerable increase is required in the number of tutors; they must be selected for their exceptional mastery of the language; and an endeavour must be made to find and retain such men by raising the status, and increasing the emoluments, of the tutorial position.

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POST-GRADUATE STUDIES IN THE UNIVERSITY OF CALCUTTA.—The report for 1918-19 has just been issued. Besides regulations for post-graduate studies and for the M.A. degree, lists of members of the staff, and the reports for the year of the Councils for Post-graduate Teaching in Arts and in Science, it includes a long explanatory statement given in the Senate by Sir Asutosh Mookerjee. The new regulations for post-graduate study were approved by the Senate in September 1917. Thus, the first session, 1917-18, was necessarily shorter than the normal, and the 1918-19 session, now reported upon, is the first complete year in the carrying out of the scheme.—This scheme is the most conspicuous part of the attempt to make the university a teaching university, and the experiment is of the greatest interest. It is laid down that “post-graduate teaching in Calcutta shall be conducted only in the name and under the control of the University.” The lectures

are delivered in Calcutta, though post-graduate teaching in other college centres, by professors of the colleges there, is contemplated. A carefully chosen staff includes teachers in the employ of the university, teachers lent by colleges or government departments, and others who may be suitable; and all are remunerated for this special work. The two councils for post-graduate teaching in arts and science respectively include among their ex-officio members all those engaged in the work which they control. There are both internal and external examiners, and (an interesting provision) the former are such of the members of the board of higher studies in a subject as have been appointed teachers. In each subject there were two classes—first year and second year. The total number of students was 1,312 in Arts and 174 in science. In the department of English there were 521 students.

These classes give preparation for the M.A. and M.Sc. degrees. Space does not permit of detailed references to the courses, but there is particular interest for us, at present, in the nature of the course in English. The University is to be congratulated upon the provision of an option between literary and philological specialisation. Further, under certain conditions, a candidate may substitute a thesis for two papers. Such a combination of thesis and examination is eminently desirable. Again, in English, as in other departments, the most careful arrangements are made for tutorial supervision. "The total number of students" (in English) "was divided into 30 batches; 15 in each year. To each member of the staff was assigned one or more of these batches." (No member of the staff had more than 4.) "Essays were given by all students and marked with written notes and comments." Again, in English, as in all other subjects, each lecturer was required to draw up in advance a syllabus of his course of lectures, and copies were distributed to the students.

Sir Asutosh Mookerjee makes reference to certain criticisms of the scheme and its working. Obviously, it is exceedingly expensive, and particular objection seems to have been made to the expensiveness of the department of Sanskrit Studies, in which, for 33 students, there were 22 lecturers! "The term *Sanskrit*" he replies, "connotes in the domain of knowledge an empire by itself." Under Sanskrit, provision has to be made for courses in ten groups of subjects, and in view of the special importance of these studies, and the sort of specialisation they require, Sir Asutosh's defence appears adequate, so far as Sanskrit in particular is concerned. And if criticism is levelled, on this ground of expense, at the scheme in general, it should be remembered that it is not merely for lecturing that the staff are employed.

It is fully recognised that research is an essential function of the true university, and, as is remarked in Sir Asutosh's address, "higher teaching is likely to be of little value unless it is imparted by men who are themselves engaged in extending the boundaries of knowledge." Thus, appointments to the post-graduate teaching staff are to be regarded "as in the nature of fellowships for the promotion of investigation and research." Further, so far as we can judge from the report, it is the practice not merely to expect original work on the part of a lecturer, but also (a necessity often overlooked) to allow him time for it. That such work is being done, and is of much interest, is evident from the report on "publication," and from many references in the address. There are, then, such justifications for the expense incurred. Yet two ideas occur to the outsider. Is not the ordinary graduation work really of prior importance, and where is the university to get the enormous amount of money required for the amending, according to the University Commission Report, of that and of the school system? And, secondly, is there any relationship between the expensiveness of post-graduate studies and the recent raising of the fees for all examinations, and if so—is it fair? But of these points the university itself is no doubt the best judge.

Extension lectures are another department of the activity of these councils. A number of series were given, and that of Mr. R. Shama Sastri, of the Mysore Oriental Library, is mentioned with great appreciation. But the titles, in general, suggest that in Calcutta, as in Mysore, the problem of extension lecturing has not been tackled with real success. For the most part the lectures seem to have been academic in character. Large numbers of the general public are said to have attended some of them; but in Calcutta, with its huge population, and its enormous number of graduates, a considerable section of "the public in general" are interested in academic matters. Extension lecturing is meant for the man in the street: it should give some sort of substitute for university education to the man who has been unable to go to college. And for this a very different programme is required, and, in time, will no doubt be provided.

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THE MADRAS SENATE MEETING.—The Senate of the Madras University met on the 24th and 25th of October. The motion to appoint a committee to report upon the applicability to the University of the Calcutta Commission Report was carried by a very large majority. Some members seemed to think that a Government pronouncement

should be awaited, particularly since secondary education was involved; but most were in agreement with the contention of Mr. MacPhail that in this as in everything the initiative should be the University's, which must make up its mind how far the report was relevant to its needs. And, as was pointed out by Mr. C. P. Ramaswami Iyer, the committee, like the Commission, would deal with secondary education only as related to entrance to the University.—The zeal of the University for the furtherance of the study of Indian Economics was further demonstrated by the Senate's approval of the Syndicate's recommendation that, in addition to the Professor of Indian Economics, a well-paid assistant professor and two readers should be appointed.—The most interesting, and apparently the most-discussed, proposals were with regard to the B.A. course in English. The Syndicate had made certain recommendations intended to "lighten and simplify" the course—for example, by excluding prose authors prior to Dryden, and by limiting the requirements as regards the study of "English literature" in general. These recommendations had proceeded, after long discussion, from the Board of Studies in English, who were resolute against further change; and they were passed without difficulty. Thereupon, however, Mr. Statham moved the abolition of the papers in Language and in Rhetoric. Several members of the Board of Studies voiced the contrary opinion of the Board, but the motion was carried by 37 votes to 26. We do not here seek to discuss the question of the suitability to an Indian B.A. course of the study of these particular subjects. But we cannot but comment upon one idea that emerged in the course of the debate. Some months ago Mr. Coutts-Trotter had well remarked, in a meeting in the Presidency College, that the great question at issue was whether students were to be given a *literary* training in English, or were simply to be taught the efficient use of the language. He seems now to have decided upon the second alternative. He said (we quote from the *Madras Mail's* report) that "the English required for the pass degree was the mere handmaid of the student's researches in other directions... What was wanted was a sufficient knowledge of English to carry on." Another speaker voiced thus the same opinion—"All that was necessary for the ordinary B.A. pass student was a workmanlike knowledge of the English language, and the ability to express himself elegantly and concisely so that he might be understood by his neighbours." The rejoinder to this is simple enough, and it may be given in Mr. MacPhail's words—"They were dealing now not with school-boys, but with undergraduates of the University." If our course in English is to be simply a course of training in the accurate use of language,

then, so far as English studies are concerned, the name "University" is a mere mockery, and our graduate, whatever he may be, is certainly not a graduate in English. Graduation in any language-subject, in any university, is bound to have primary reference to literature. The University of Madras has constantly, and in face of much opposition, sought to maintain itself as a *real university*, and to approximate more and more closely to the standards of the universities of England, and the Madras graduate has gained enormously, not merely in education, but in recognised value, by this endeavour. We doubt whether Mr. Statham's motion is disadvantageous. On the whole, we approve it, but would substitute for what it cuts out additional works of comparatively modern literature. But what we do think to be disastrous is the feeling, so authoritatively expressed, that the study of English literature for its own sake is no essential part of a graduation course in English. If this view is carried out in practice, it will strike at the high reputation of the Madras University.

CAPTAIN PETAVEL'S SCHEME.—Captain Petavel has very kindly found time to write for us a brief article suggesting the central ideas of his educational scheme. He was invited to visit Mysore during the Dasara season, to lecture upon this scheme, and his lecture was attended by the Dewan and the members of council as well as by a number of representative educationists. After hearing Captain Petavel, and reading certain reprinted articles of his, they found themselves desiring a somewhat more rigorous reference to facts, and something more definite in the way of theory. Captain Petavel speaks of European farm-schools, but does not detail their possible adaptation to Indian conditions. He speaks of self-supporting education, chiefly on an agricultural basis, but as to whether, or how, it can be worked in India we are given no idea. A co-operative principle is, apparently to be applied to every sort of educational institution, even the highest, but we are not told how. Even in *colleges*, young men are to "earn commercially while learning," and so far as we can see, the fact that there are, and always will be, professions other than those materially productive is ignored. But Captain Petavel's least fortunate references are to what he calls "our education system." It does not serve any good purpose to apply to it such phrases as "conceived in ignorance," and criticisms should be supported, as they are not in any of Captain Petavel's productions that we have seen, by arguments revealing some knowledge of the details of the system, and of its principles.

Captain Petavel seems to forget that the planners of educational systems as they now exist were not precisely dotards, and that special training and life-long experience did equip them for their task—a task very much more complicated than it appears to those who have no inside knowledge of educational work. We write with no lack of appreciation of Captain Petavel's enthusiasm and devotion; but educationists have much to suffer from those who have served no apprenticeship to the most complex of arts, and who imagine that some abstractly conceived idea (possibly familiar, for centuries, in the educational world itself) would revolutionise education for good. Education will not be revolutionised on Captain Petavel's lines; and when we find him saying, as he did in his lecture in Mysore, that if we cultivate vitality in the school-boy we need not trouble about the imparting of knowledge—that, given vitality, education will come of itself—we know that he will not help us far in the general conduct of education.

What, then, can we get from him? We know that the idea of the farm-school is a sound one; and we hope that, if Captain Petavel can obtain funds for the starting, in a country district, of a school in which the "earning while learning" principle is adopted, he may be able so to adapt the scheme to Indian conditions as to make "self-supporting education" a reality for its students. He may be assured, however, that no pupils will be forthcoming except those belonging to the agricultural and labouring classes, and that no millennium will so modify those class distinctions which are distinction of function as to change this fact. Of immediate and practical importance, however, is the idea, justified, apparently, by successful experiment in his Polytechnic Institute, of introducing manual work of many kinds in the regular school course. This idea was already under discussion in Mysore, but chiefly with a view to vocational training. Captain Petavel has the vocational purpose too; but he lays stress upon the educational value, for *all* pupils, of this training, and apparently it is taken by all. We are very doubtful about the value of *vocational* training in schools. We feel that no kind of technical training in schools can be carried so far as to become really useful vocationally without a corresponding neglect of general education. But even a little regular practical work has an enormous *educational* value. It is probably of greater value to those who will become professional men than to those who will become artisans, for it develops a side of them that will always be neglected. It ought to be compulsory, for the boy who is most reluctant to take it is the boy who needs it most. Rousseau would train Emile in carpentry—and that not merely for the training of eye and hand, though

this is much. Carpentry "gives enough exercise ; it calls for skill and industry, and while fashioning articles for every day use, there is scope for elegance and taste If instead of making a child stick to his books, I employ him in a workshop, his hands work for the development of his mind. While he fancies himself a workman he is becoming a philosopher."

THE ENCOURAGEMENT OF GAMES IN SCHOOLS.—It has been much emphasised of late that the huge percentage of failures in the University Entrance Examination is due in great part to the unsatisfactoriness of school conditions and school instruction. There is a precise parallel in the athletic department. The Mysorean makes an admirable athlete when he gets a chance of early training. Now, in football he does get that training. Football is played constantly, and exceedingly well, in the schools; and the colleges, fed by the schools, produce excellent teams. We remember seeing the Central College football eleven playing in a Madras tournament two years ago, and though they were beaten in the final by a team partially consisting of booted Europeans, they made the football of most of the Madras colleges look quite foolish. They played together, and they could shoot. In other departments of sport, however, the Mysore schools are very unsatisfactory feeders. It would be quite a simple matter greatly to improve this state of affairs, and we commend the following suggestions to the Education Department, the head of which is known to take a keen interest in this side of education. We may take cricket as an example. Ground, we believe, is not a great trouble, most of the high schools being fairly well equipped with playing fields. But they are quite inadequately supplied with materials. Nor have they sufficient stimulus in the way of matches. A mofussil school may find no opponents at all. It is essential that these schools should meet each other, and not in cricket only but also in football and if possible in hockey. There should, as in Madras City, be a regular league of schools. This would obviously work for good even outside the athletic sphere. This league would cost money, but not very much after all ; and surely it is agreed that such expenditure would be well worth while. It would indirectly confer as great a benefit upon the colleges as it would confer directly upon the schools themselves. The schools would take up the idea with great enthusiasm. Mysore has just been visited by the cricket eleven of the Chitaldrug High School. Indeed, fifteen players were brought, and that, we believe, without any assistance from the Department. That is

something like a maximum journey, and argues some enthusiasm and self-sacrifice on the part both of the boys and of the head-master and staff. One other point. In making appointments to the staffs of schools it might be possible, in some cases, to take athletic qualifications and enthusiasm into account. It need hardly be pointed out how constantly this is done in England. And one of the best cricketers in the Mysore State is employed at present in a non-government high school, largely on the score of his cricket. We congratulate that school. In general the staffs of Mysore schools know little and care less about games, though even one or two exceptions make all the difference in the world to a school. No doubt this suggestion is beset with difficulties; but we think the principle might be definitely accepted, and applied as occasion serves.

THE CALCUTTA UNIVERSITY COMMISSION REPORT.

BY the favour of circumstances and the courtesy of the new editor, I find, contrary to my expectation, that I am able to undertake the congenial task of commenting on the Report of the Calcutta University Commission.

After a careful and appreciative study of the Report, the thought which comes uppermost to the mind is one of keen regret that such a monumental work, so masterly in its analyses, so statesmanlike, bold and far-reaching in its recommendations, and so felicitous in expression, will be read by comparatively few even of those who are deeply interested in the educational welfare of India. It is a stupendous work, its five volumes averaging 420 pages each; yet it is eminently readable, and the enthusiast who has the time for a leisurely perusal will not willingly part with a single line. But undoubtedly the Report is diffuse and elaborate; there is repetition and overlapping, and points to be driven home are reiterated again and again, though in different and original phrasing. Had the Report been more concise and embodied, say, in two volumes, it would have been possible for busy educationists, and the thousands of busy educated laymen interested in the subject, to make themselves acquainted with its details. As it is, I am pretty confident that the Report has not been read, and will not be read by anything like the majority of the educated public. This is greatly to be regretted, for the reforms which are advocated, and on which the welfare of India so largely depends, must have the sympathy and support of the educated public if they are to be effectually carried out; and to such a public the Commission themselves repeatedly appeal for support. But that support would be more fully and best secured if the actual language embodying the fine phrasing, the cogent reasoning, and the almost inspired insight of the Commission could be read word for word by people at large. As it is, the Report will be a closed book to many, and so much that is of literary value and nobility of purpose, inspiring and stirring, will be buried, so far as most people are concerned, once for all under the weight of these five imposing volumes. From such a fate the Report can

partly be rescued should it be found possible to issue in two small volumes the actual words of the Commission on the salient points of their reforms. And if the two volumes were issued at a rupee each, they would have thousands of readers whom the present Report will never reach. The suggestion seems to me quite reasonable; and it would be worth anything to be able to enlist the intelligent sympathy of the educated classes in the matter.

The Report when it is fully issued will consist of thirteen volumes, of which the first five have already been published. The remaining eight volumes will deal with the details of evidence and with the statistics of the subject. For all practical purposes, the Report of the Commission is contained in the five volumes already published. These are divided into two parts. Part I (Vols. 1-3) consists of analyses of present conditions. In these analyses slight hints of proposals and recommendations are sometimes given following on the trend of the evidence offered by the correspondents and witnesses. But so skilfully are the conditions and evidence analysed and put forward that we are gradually and convincingly led to anticipate the reforms which make up the last two volumes. These volumes (4-5) constitute Part II, and they contain the specific recommendations of the Commission. Although these primarily apply to the University of Calcutta, many of them can be, and are intended to be, applied to the other Indian universities. The recommendations of the Commission will naturally be subjected to much criticism and some of them to keen opposition; but it is gratifying to see how warmly and generally they have been approved on a preliminary survey of the Report. This is but natural in view of the extraordinary knowledge displayed by the Commission of educational conditions, their comprehensive grasp of the subject, their bold and successful attempt to deal with a radically defective system, and their keen sympathy for the people of this country.

Most certainly the Commission have justified their existence and the spreading out of their labours over the long period of eighteen months. There can be no reason to doubt, now that the Report is before us, that the success of the Commission is very largely due to the inclusion in it of the experts from England under the presidentship of so capable an educationist as Sir Michael Sadler. I remember at the time when the composition of the Commission was first mooted, that a large section of the press in India took the strongest objection to the inclusion of members from England. The objection that the commissioners from England had no experience of Indian conditions was met

in the pages of this Magazine, where it was pointed out that the reforming zeal of the commissioners from England, who had been accustomed to grapple with large questions of university education, would work as a leaven and stimulus; but would be restrained, when necessary, by the knowledge of local conditions possessed by the other commissioners. The striking difference between the constitution of the Commission of 1902 and that of 1917 was also pointed out. In 1902 every member was resident in India, and although the Commission consisted of able and distinguished men, it quite failed to read the signs of the times, several proposals in favour of new universities being one and all rejected. Great things were confidently expected by some of us from the new Commission of 1917 for the very reason that it contained men who would be able to take large, detached and independent views of the problems associated with higher education in India. Now that the Report has been issued and its character made known, not a word is being raised against the constitution of the Commission, and the original objection has been lost sight of in the admiration which the Report has evoked. But we should not lose sight of the fact that it is to Lord Chelmsford, the Viceroy, that the credit is due not only for suggesting the Commission itself, but for ensuring its success by insisting on the inclusion of members from England. Without the latter condition, the Commission might have gone the way of that of 1902, and in any case it is safe to say that it would never have ventured on the outspoken and original recommendations of the present Report.

How bold and far-reaching are the reforms recommended by the Commission, may be gathered by a reference to the more important of them. One such is that the work of the intermediate classes is school work and should be absolutely excluded from the University and placed under a new administrative body, the Board of Secondary and Intermediate Education. Another bold reform is the institution of Teaching Universities, whether of the unitary type as at Dacca or of the multi-college type as at Calcutta; and consequent on this the withdrawal of the direct control of the universities by Government. Other reforms include the creation of a new body, the Academic Council, which gives new and large powers to the teachers; the formation of a University department of Teaching; the institution of a Tutorial System, of Honours and Research courses; reform in the methods of teaching especially in regard to English; the use of the Vernacular as the medium of instruction in the High School course; the modification of the methods of examination and the introduction of an oral test; the recommendations for the physical

welfare and the residence of students ; and lastly the revolutionary proposal to place all teachers, whether private or government, on the same professional footing, and to abolish the present system of Government Service. Such far-reaching reforms involve an enormous outlay. Of this the Commission are aware, but are undeterred by the colossal nature of the financial aspects of their proposals. As the evil is great so the remedy must be real and drastic, and, in terms of money, extremely costly. Naturally the Commission is not slow to point out that the investment of capital in education would, apart from other results, prove most profitable. " But we are aware that what we have proposed may at first sight appear too exacting a burden upon the public revenues. We should agree, if the expenditure which we advise to be made were unproductive. But in our belief it will be remunerative expenditure, not only in its effect upon the deeper sources of moral strength but also upon the economic welfare of the country and upon its civic and industrial initiative. We should not have thought it desirable to propose expenditure with a view to the indefinite enlargement of the kinds of unprofitable education now prevalent in Bengal. A change which will help in getting rid of these shortcomings in the present system of education and which will give a stimulus to the capacity for public service in new careers will in the long run be an economy, as well as in other ways a boon to Bengal; and, through Bengal, to India and the world."

It is impossible in the space allotted to a magazine article to go into the details of these reforms, to say nothing of the many minor reforms which have been omitted in the above survey. The fundamental reform on which all the other reforms of the Commission depend, that of the separation of intermediate work from the university and the addition of another year to the university course, is one which cannot fail to meet the approbation of all those with experience of college teaching. Unquestionably boys are admitted to the university course who are unfitted, especially by reason of their imperfect knowledge of English, to benefit from university teaching. The intermediate course is to be relegated to the school, and that course is to be widened by the inclusion of a number of practical subjects which will prepare boys for a business or industrial career after they have successfully gone through the Intermediate course. Many boys who, so far, have had no career open to them except through the portals of the universities, will be diverted from a higher course for which they are not fitted and will gladly avail themselves of the opportunity which the new practical courses of the intermediate institutions will open out

to them. The intermediate course will therefore serve a double purpose. It will be both a terminal course for many who have now no alternative but to strive to enter the university, and it will also be a preparatory course for those of the intermediate students who have the aptitude to profit by a university training. With the improved methods of teaching which the Commission indicate, and the selection of a relatively small number of candidates for the university, the present problem of university education will to a great extent be solved. It will be further solved if the improved methods suggested for the universities, such as rational methods of teaching English, a real tutorial system, concurrent honours courses, and improved methods of examination, are introduced and made a reality. Then we may confidently look forward to a corresponding improvement in the output of the universities.

Perhaps the boldest reform suggested by the Commission is that by which the powers of Government in relation to the universities are to be considerably curtailed. It seems unlikely that such a reform would have emanated from the Commission had not the latter included members from England unaccustomed to the degree of subordination which marks the present relations of Indian universities to the Government. Freedom has been called the life-blood of a university, and the Commissioners are of opinion that the present relations are altogether inconsistent with the type of university which they contemplate bringing into existence. They believe that the details of university administration will be more efficiently worked out by the sole action of the university, and that, with a more intimate knowledge of the qualifications required, the university should be allowed to make all appointments. The sense, also, of responsibility resting on the university will be more developed if it is given greater control over the finances and the ordinances and regulations. On those three points of legislation, finance and appointments, the Commission make a very decided stand in favour of the university.

That, too, is a very striking reform which recommends that all teachers whether private or government, both in the intermediate colleges and in the universities, should be placed on the same footing in regard to the method and nature of their appointments. Government service is to cease and the appointment of teachers is to be to the profession, to the university or college as such. The reform is drastic, but I believe it to be most salutary. It will remove the gross anomalies which now exist between government and private teachers. It will make aided and private institutions much more efficient by attracting to them a better class of teachers than those who can be

obtained under present conditions. I believe, too, that the reform would do much to develop the professional feeling which is so much lacking among teachers in this country. The recommendation is so startling and revolutionary that it probably will not commend itself to those who enjoy the privileges which attach to government service in this country. This is a service which for extent and degree has no parallel in the world, and to enter it is, unfortunately, the ambition of the great majority of our graduates. I am convinced that this is one of the most important and urgent of the recommendations of the Commission. Would that I were equally confident that the reform had a reasonable prospect of being carried out!

The recommendation of the Commission for the establishment of teaching universities is important—though not so striking as others, inasmuch as India has at last become accustomed to the idea of such universities and is already in possession of two or three which are working on lines impossible for the older universities. In regard to the vernacular as the medium of instruction, the recommendation of the Commission will probably satisfy all pro-vernacularists except those few extremists who would go the whole length and have the vernacular as the medium of instruction from the primary schools up to the conclusion of the university course. Theoretically they are right, for it is most unnatural that an Indian cannot graduate in his own country in his native language. But there are other things to consider, and the recommendation of the Commission that the vernacular should be the medium of instruction throughout the high school course, except in English and Mathematics, seems to me a reasonable compromise and a very great step forward. The question has been a vexed one for years, and it is something that we now have the definite decision of so high an authority as the Calcutta University Commission. The Commission have nothing to say in regard to the introduction of the vernacular as the medium of instruction for girls, and we may take it for granted that what they have recommended for boys is what they would recommend for girls, *i.e.*, that the vernacular should be the medium of instruction up to the close of the high school course and English the medium for the intermediate and university courses. In this respect they have put the women on a footing with the men, and by implication they deprecate the idea that the vernacular should be the medium of instruction for girls in the university course.

This Magazine is the organ of the Mysore University, and it is therefore not only excusable but actually fitting that a few words should be said on that University in connection with the findings of

the Calcutta University Commission. The Mysore University is one of the newer Teaching Universities, and the smallest in India. On the face of it, it is evident that much which is properly recommended for a huge university like that of Calcutta, the largest in the world, is not necessarily equally applicable or desirable for the University of Mysore. But it is gratifying to find that the University of Mysore is, generally speaking, being worked on lines similar to those recommended by the Commission, and that the Commission have put the seal of their approbation on the University. "We believe that the foundations of the new University have been truly laid and that school-boys and college students alike will benefit by the new departure." Particularly in the matter of the Commission's fundamental reform of the separation of the Intermediate work from the College course the Mysore University has reason to congratulate itself, inasmuch as the reform has been in working in the University from the beginning. But we do not go so far as the Commission recommend, for we have only a one year collegiate or intermediate course as against the two years in the scheme of the Commission. Owing to the large number of failures in the Entrance Examination of the Mysore University, the great majority of the candidates are forced to undergo a two years course in the collegiate classes. So far as these are concerned, the introduction of another year into the collegiate course would not be a hardship. If another year is added to that course, it will be advisable to introduce a number of practical courses as recommended by the Commission, and as regards these subjects to make the Collegiate course a terminal one. With a view then to bring the Mysore system into line with the extended course of other Indian universities, to give our students a better preparation for the university and for a business and industrial career, it is desirable that another year should be added to our present collegiate course.

The Mysore University has already a tutorial system in working. Indeed, it has a dual tutorial system—an instructional system conducted by young tutors, and also a professorial system according to which every student is allotted to one of the professors or assistant professors. The University also insists on the teaching of a second language throughout the B.A. course, and in this way the systematic study of the vernacular is encouraged. The burden of English has also been lightened, but further reform in the teaching of this subject is necessary. Then, too, there are Extension Lectures and Publication Boards whose object is to stimulate the intellectual life of the State. In regard to the physical welfare of the student, of which the Commission very

properly make so much, we have the beginnings of a Physical Culture Scheme, Unions for the development of the social side, and extensive hostels affording good board and lodging at reasonable rates. At the headquarters, in Mysore, five residences for the professors are nearing completion, while at the Maharaja's College comfortable private rooms are provided for members of the staff. Indeed, almost every important reform recommended by the Commission has been anticipated, in form at least, by the University. What we still need are Honours Courses, a Teaching Department and Training College, and the introduction of two or three much-needed Faculties such as Medicine, Agriculture, Metallurgy and Law. A very necessary reform which lies outside the province of the University is that of making the schools much more efficient than they are at present, and this can only be effected by improving the pay and prospects of the teachers and by insisting on the possession of the qualification of training as a future condition of appointment. So, although the University of Mysore has been started on the lines recommended by the Commission, there is still much to do both in perfecting reforms already adopted and in introducing others suggested by the Commission.

It cannot be that the Government of India will allow the Report of the Commission to become a dead letter. On the contrary, there is every reason to believe that the institution of the almost ideal University of Dacca will be immediately taken in hand on the lines indicated by the Commission. As regards the reform of the University of Calcutta, steps have already been taken, and that University has been called upon to report on the recommendations made by the Commission. In the Provinces the different governments and universities have appointed committees or other agencies to consider the recommendations of the Commission with a view to seeing how far they are feasible or desirable in the existing local conditions. On all sides then there are indications that action will be taken on the Report of the Commission. It would be a calamity if it were otherwise; for there can be no doubt as to the defects of the present system of higher education in India, and probably not much less doubt that on the carrying out of the recommendations of the Commission depend not only the future welfare of education but also the interests generally of India. That country is on the eve of great industrial, social and political developments, and the success and extent of these will depend very largely on India having an efficient system of education such as is indicated by the Calcutta University Commission.

THOS. DENHAM.

ROMANTIC: REALIST: CLASSIC.

1. 'FORMERLY,' said Michael Gotz, 'we had a *romantic* at our head—that was Gershuni; now we have a *realist*—Azev.' C. E. Bechhofer: APRIL '19, *Nineteenth Century*.
2. Le *romanticisme* est l'art de présenter aux peuples les œuvres littéraires qui, dans l'état actuel de leurs habitudes et de leurs croyances, sont susceptibles de leur donner le plus de plaisir possible. Le *classicisme*, au contraire, leur présente la littérature qui donnait le plus grand plaisir possible à leurs arrière-grands-pères. Stendhal, *Racine et Shakespeare*.

The readers of the *Mysore University Magazine* may complain that the subject presents no freshness at this time of day and that it is about as mouldy and venerable as the pie that saddened the member of the Breakfast Table. Two recent books, Wyndham's *Essays in Romantic Literature* and Lemaitre's *Contemporains, 8th Series*, having brought up the distinction between romantic and realist and classic much to the puzzlement of their reader, are in a way responsible for this attempt to explain these terms constantly occurring in literary discussions.

What is the historic origin of the distinction? Who were the peoples that contributed to the 'Romantic' outlook on life? What are the characteristics of *romantic* as contrasted with *realist* on the one hand and as contrasted with *classic* on the other?

Hallam mentions casually, in the last chapter of his *Middle Ages*, the controversy as to whether the Celts, the Teutons or the Arabs were the originators of the Romantic movement. In his *History of Literature* (Vol I. 135, Ed. 1882) he says that romance is related to the three cults of the middle ages—chivalry, gallantry and religion. "Upon these three columns repose the fictions of the middle ages, especially those designated as romances." These cults themselves were directly or indirectly influenced by the races or peoples above referred to. The passion and ideality of love may be recognised as a

Celtic contribution. The chivalrous elements have been traced to the Teutons and the Saracens. Religion gained additional fervour through the positive and negative influence of the crusades. The religious ecstasies of the middle ages in the form of Mariolatry and Jesus-worship are explained by students of religious psychology as the characteristics of mundane love sublimated in the fires of devotion.* We may accept as correct the historic origin suggested by Mr. Wyndham, though we need not go to the length of accepting the precise date he mentions of the origin of Romance. On page 9 of his book Mr. Wyndham asks, "When and where does Romance arrive in European literature?" and furnishes the following answer. "The answer to the first question is, not before the second half of the eleventh century; and to the second, probably in Great Britain. The first piece of obvious Romance in literature that remains is the 'Song of Roland,' as we have it in the Oxford MS. The composition of the poem is attributed to a Norman, and the date of it placed between the Norman conquest of England in 1066 and the Crusaders' conquest of Jerusalem in 1099." The centuries immediately preceding prepared the way for the advent of Romance. The significant historic facts that bear on the problem are referred to in pages 10-12 of *Essays in Romantic Literature*.

The view placed before the Edinburgh University by its Lord Rector is substantially—with regard to the originating influences—the view advanced by Stopford Brooke twelve years earlier in his "English Literature from the beginning to the Norman Conquest." On page 299, after referring to Danish and other earlier influences, Brooke says, "Into this river of varied waters flowed the Norman stream. That literary stream itself was mingled of three other streams—of the original Norse; of the French (partly Gaulish and partly Latin); and of the Celt. All these, together with an Eastern strain, make up Romance; and this, vitalised through the Norman energy, and enchanted by all the Celtic legend and spirit of Armorica and Wales, poured in full stream into the Anglo-Saxon and Celtic admixture, and for a century and a half dominated English literature." Though in 1897 Mr. Saintsbury referred to the unwisdom of critics "who endeavour to tie Romance to a Teutonic origin or a Celtic" (page 415, *Flourishing of Romance*), he came to favour the view of Stopford Brooke: see his article on Romance in the 11th Edition of the *Encyclopædia Britannica* (1911). Support for this view may be gathered also from Mr. Ker's *Epic and Romance* and *The Dark Ages*.

* Osborn Taylor: *The Medieval mind*: Vol. I, Book III.

'Romantic' indicates the quality characteristic of Romance, and the adjective may have a wider connotation than the substantive, because in the process of analysing the substantive qualities, each quality abstracted must comprehend within its scope a wider circle of objects than the group it detached itself from. It is not all the qualities common to the concept 'Romance' that we refer to when we use the term 'romantic.'—The chemist's gold has more qualities than 'golden' in 'Like a glow-worm golden in a dell of dew' and Jove was something more than Jovial in his character as a deity. This less restricted character of the adjective is what causes ambiguity and hence the Janus-faced antitheses of 'Romantic' implied in the quotations at the head of the article.

The contrast may be more easily made out if we see that it refers to two aspects of the 'romantic,' of *content* and *form*. *Realist* and *romantic* have reference to the logical universe of 'content,' the subject matter of the literary work; *classical* and *romantic* to that of form or style. *Realist*, *realism* we usually contrast with *idealist*, *idealism*, and the reference to the subject matter coming in for artistic treatment is at once perceived. The nearer artistic presentment is to the world as perceived, or apprehended, the more realistic its character will be. The remoter the artistic presentment is from the world of felt experience the more idealistic will be its character. In these cases 'romantic' is often used as equivalent to idealizing, idealistic. It is a moot point whether there can be in art the photographic reproduction of reality, and there is the further fact that even in photography the sun as an artist selects only the elements of the world of experience as revealed to the human eye and to that extent idealizes reality. Even the crudest realist is not able to crowd into the pages of his book the heaving, surging, polyphonic, multi-coloured world of his limited experience. Attempting to reproduce the real he hits on the exaggeration of ugliness. It is of the essence of all art to have something of imaginative heightening of the real; that is, if idealism is regarded as an irrational surd, there can be no such thing as rationalising it in the region of art.

Hence if we talk of realistic or idealistic characteristics they imply only differences of degree, they show only tendencies, they are more or less approximations. All the same this is a useful distinction. It dates from the first European critic, Aristotle: "If it be objected that the description is not true to fact, the poet may, perhaps, reply, 'But the objects are as they ought to be': just as Sophocles said that he drew men as they ought to be; Euripides, as they are."*

* Aristotle's *Poetics*: Prof. Butcher's Translation, p. 106. See also Symonds' *Essays*, p. 184.

Heavenly is idealised earthly experience. All earthly things are imaged there.

“ In happier beauty ; more pellucid streams,
An ampler ether, a diviner air,
And fields invested with purpureal gleams.”

In the dream world of the boy

“ Flowers put forth a fairer hue,
And everything is strange and new ;
The sparrows are brighter than peacocks here,
And their dogs outrun our fallow deer ;
And honey bees have lost their wings,
And horses are born with eagles’ wings.”

Accepting then for the time that when people pit against the ‘romantic’ the ‘realist’ as Mr. Bechhofer does, they use the word ‘romantic’ as synonymous with ‘idealist,’ one might suggest that in the interests of clear thinking the less ambiguous word should be preferred in cases where the content of the work of art, the stuff of experience, is referred to, and that ‘romantic’ should be reserved for contrast with ‘classic.’

The characteristics of ‘romantic’ and ‘classic’ relate to style, the mode of workmanship. These have been pointed out once for all by Sir Sidney Colvin in his Introduction to his “Selections from Landor” : “In classical writing every idea is called up to the mind as nakedly as possible, and at the same time as distinctly ; it is exhibited in white light, and left to produce its effect by its own unaided power. In romantic writing, on the other hand, all objects are exhibited as it were through a coloured and iridescent atmosphere. Round about every central idea the romantic writer summons up a cloud of accessory and subordinate ideas for the sake of enhancing its effect, if at the risk of confusing its outlines. The temper, again, of the romantic is one of excitement, while the temper of the classic writer is one of self-possession. No matter what the power of his subject, the classical writer does not fail to assert his mastery over it and over himself, while the romantic writer seems as though his subject were ever on the point of dazzling and carrying him away. On the one hand there is calm, on the other enthusiasm ; the virtues of the one style are strength of grasp, with clearness and justness of presentment, the virtues of the other style are glow of spirit, with magic and richness of suggestion.”

Once these distinctions are thoroughly grasped by the students of literature, they will not feel puzzled by statements made by writers like George Wyndham, Emile Deschanel and Lemaitre. What does Wyndham mean by the following: “Romance founded

on imagination, and realism founded on observation, are the primary methods by which the mind seeks to express the need of the heart. The classic method is a secondary method." 'The primary method' must evidently refer to the 'content' of the work of art. The method of imagination seems to refer to the imaginative heightening of experience, the creation of the wonderland, of the realms of gold, held in fee simple by the poets. What realism creates must also refer to artistic work as that also 'seeks to express the need of the heart.' The difference between 'the primary methods' is a difference of degree of approximation to truth.

The 'secondary' method is the method of style—'classic' as contrasted with 'romantic' by Sir S. Colvin.

Let us test our definitions by what Lemaitre says in his 'Contemporains.' The title of one of the chapters is "the romanticism of the classics." This is startling enough to begin with. If the reader will recall what was stated earlier, that the adjective 'romantic' might have a larger connotation than the corresponding noun, it will not be extraordinary if 'romantic' as a literary quality is traceable earlier than the 11th century romance, if the Odyssey is characterised as romantic, if Virgil is charged with being romantic, if Prof. Butcher has an essay with a similar title in "Some aspects of the Greek Genius."

Lemaitre goes on quoting from M. Deschanel: "Est-ce que cela n'est pas romantique? Ou, si vous voulez, très neuf, et très original?"

"Si on entend par romantisme la création dans le style, comment ne pas être frappé de romantisme de Bossuet?"

Again, "Saint-Simon est non seulement un romantique, mais un réaliste."

Here is surely "l'excessive largeur de sa définition du romantisme."

After referring to the evil influence the word romanticism has exercised on M. Deschanel, Lemaitre remarks that his book, such as it is, may be also justly called "The realism of the classics." To any one that has followed the attempt so far made to fix the value of the small change of literary criticism, there will be no oxymoron in the last phrase.

It is hoped that this note, which the literary expert may regard as a piece of superfluity explaining the obvious, may serve the non-experts among the readers of the *University Magazine* as furnishing them with a clue to the critical mazes of writers like Wyndham or Lemaitre, Stevenson or Quiller-Couch.

K. B. RAMANATHAN.

THE EDUCATION OF GIRLS IN INDIA.

It is probable that the fundamental problems of the education of Indian girls will never be thoroughly understood, much less solved, until there has been produced a large class of highly educated Indian women who can bring to bear on the matter their knowledge of Indian character and needs, and minds trained to clear and comprehensive thinking. The first need is to produce such a class, but at the same time there should be a wide diffusion of a less advanced education among women in order that there may be a public opinion to support without prejudice the future women leaders.

Women's education in India is still at a very early stage. The indifference of the great mass of Indians to it is shown by the very small proportion of girls of school age who are at school. Yet the plant has taken root and is now in a state of healthy growth with many kind friends who would do much to promote its prosperity and fruitfulness. However great the doubts that may have been felt before it started it is safe to say now that no educated women regrets that she was educated or would be willing for her daughters to forego education. As far as we can ascertain the collective mind of Indian women, it is unmistakably in favour of education. And that in itself should be argument enough for promoting and extending women's education, for half the nation consists of women and there is no reason why their desires should not be entitled to as much consideration as the desires of men.

Nor is there any reason why the education of a girl should differ fundamentally from that which has been thought useful for boys. The education of a boy was not planned for him specifically as a boy, but as a young human being whose body, mind and soul needed training in order to reach their best excellence. In matters of the intellect there is not very much difference between the boy and the girl. Moreover it can be shewn from history that it is a great disadvantage to a nation to have its men and its women at a very different level of education. One of the chief causes of the rapid decay of the brilliant Athenian culture was that women had no share in it, and that

a man's home was merely a place for the satisfaction of physical needs. The relations between man and wife, which had been satisfactory so long as both were ignorant, dwindled into insignificance as he entered upon a rich varied life of mental activity which she could not share.

"She knows but matters of the house
And he, he knows a thousand things."

The home became of less and less importance, and national degeneracy soon followed the decay of family life. Yet there is of course a difference of function and the education of neither boys nor girls should ignore the family life which both alike are to build up. The boy must be prepared to become a husband and father by learning an occupation which will bring him enough money to support a wife and family. The girl must be prepared to become a wife and mother by receiving instruction in all such household arts as can be learned at school. Great stress should be laid on this part of her education. It should rank second to no other. If gentler means cannot be found to ensure good teaching and earnest study of household arts it might be well to use the powerful weapon of the public examination. If "Domestic Science" were made an A subject in the Secondary School Leaving Examination of girls it would at once be raised to the dignity of English and every girl would become anxious to do well in it. It is not a very suitable subject for examination and there will be many practical difficulties, but no other persuasion seems sufficient to ensure a serious and persevering effort in all girls' schools to make the teaching of this study thorough and efficient.

Of course there must be a corresponding lightening of the S.S.L.C. Course and I should suggest that Elementary Mathematics should cease to be an A subject for girls. Those who intend to take a scientific course at the University do not find Elementary Mathematics a sufficient preparation and should in any case take the more advanced course in Group C. Those who intend to take Group III have not, as a rule, profited very much by their Mathematics, and also they will most likely learn Logic at College, and this will give them some of the training in exact thought and reasoning which is the chief reason for learning Mathematics. So though there would be a certain loss involved in the excision of Elementary Mathematics, it would be heavily counterbalanced by the gain of more efficient training in household duties. Moreover a certain practice in Mathematics would be kept up if domestic training included as it should, the efficient teaching of household finance, such as bazaar accounts, rates of rent,

and wages, calculation of interest and so on, and household geometry, such as calculation of areas and cubic contents.

Domestic science is, of course, mainly empirical, but still it may be so taught as to exercise the reason as well as to impart common sense. After all it is the teacher who makes a study valuable or valueless, and as domestic science is comparatively a new branch of school studies it has no bad, old traditions to conflict with and may be taught in the method which the new educational science approves.

If domestic science held this honoured place in the secondary schools it would soon win its way in primary schools where it is still more needed. Hitherto the great difficulty has been to find efficient teachers, but if every girl who leaves a secondary school had received a good training in domestic science in a few years there would be at least one teacher in every elementary school who could be responsible for this subject.

There seems however no place for Domestic Science in University studies. It should be learnt at an earlier stage and the long vacations give opportunities for women students to refresh their knowledge of what they learnt at school and keep in practice. University education should give a woman a power of judgment and a balanced view of life which will prove of inestimable value in her family occupations later, but manual dexterity and empirical familiarity with domestic contingencies should not, and indeed cannot, be sought at the University.

Except for domestic science the education of a girl need not differ greatly from that of a boy. One of the great objects of education is to make life interesting. When the first inconsiderate joy and excitement of youth is passed, most men and women feel the need of some definite continuous interest outside their own affairs. This need is recognised in the case of a man, and education gives him the foundation on which he can build up an interest in local or national politics or in books or some branch of science or art. It is not generally recognised in the case of women and yet most of the faults considered to be especially feminine arise from the temptations which beset an undeveloped and unoccupied intellect. There is always plenty of mischief for empty minds to do, and it is the limitation of women's interests to purely personal matters that is largely responsible for the pettiness, the love of gossip, the spitefulness, the vindictiveness, the indifference to large issues which men complain of in women. Let them look into other worlds than their immediate surroundings and they will lose much of their bitterness and narrowness.

The question arises here whether such an education can be conferred without a thorough knowledge of English. I think it is possible that either Sanscrit or Greek might have the same educative value as English, but neither of these would have in addition the practical utility of a living modern tongue. The issue lies rather between English and Vernacular education.

The question of the Indian languages must be settled by those who speak them. They are of course not all on one level and some are far more adequate to the needs of a modern mental life than others. Each language must be judged on its own merits. But if an educated man feels that he would have suffered if he had been confined to the limits of his native language and literature he ought not to condemn the helpless young generation to that confinement, unless he is prepared to adorn his own language with original works of such value as to make the study of English superfluous.

History teaches us that the only security for a language is the production of a worthy literature. Unless the language earns the right to survive it will not survive, for it will not suffice for its children's needs. Man does not live by bread alone and will not be satisfied with a language which is adequate only for the ordinary practical affairs of life. The time comes when people begin to desire the beauty and wisdom of literature. Perhaps like the Greeks they proceed to produce great books in their own language, but it has much more often happened that the study of an alien literature has given them the spark of life which has kindled the flame of poetic beauty in their own land. Thus Rome was for more than two centuries the docile pupil of the Greek nation which she had lately defeated. All higher education was carried on in the Greek language until the Romans learnt to write, in their own vernacular, books which made it unnecessary for a lover of literature to look beyond the Latin authors. Thus the whole of Europe sat for centuries at the feet of Rome until the individual countries produced in their own languages works which by sheer merit won the place in men's admiration which had been held by the alien literature. These things cannot be forced; they must happen spontaneously. If a language has not brought forth a literature fine enough to satisfy the intellectual needs of its most gifted children they must turn to a foreign literature or else they must suffer mental starvation.

Most people are agreed that a certain knowledge of English is needed, both on practical and aesthetic grounds, by the rising generation of S. India. But it is held by some that a much less thorough knowledge will suffice and that it is not necessary to give that

proficiency which comes from the use of English as the medium of instruction. But it is "a fond imagination" to suppose that we can combine a really serviceable knowledge of English with the use of the vernaculars as the sole medium of instruction. It is a vain hope that the teaching of English "as a second language" will give the pupils anything like the proficiency which they need if they are to feel at ease in English. They may become able to use a little English for the most ordinary practical affairs of life, and that is in itself a gain, but a conversation in English will be an ordeal and to read an English book a toilsome effort. We might ask how many of the English children who have learnt French at school afterwards feel able to talk French or care to read it. And yet French is very closely allied to English, the script and the general structure of the two languages are the same and for the most part French is taught in England by natives of France. The English and Dravidan languages are totally diverse in their whole conception, and the majority of the Indian pupils are not taught by those to whom English is a mother tongue. The average English school-girl carries away as permanent gain from the French lessons the pleasant memory of some books read in them, the power to grasp something of what is going on around her if she visits France, the better understanding of her own language by reason of her study of a kindred yet diverse tongue, and a knowledge of many French words and phrases which she will find in English books. The Indian school-girl will carry away much less than that; inasmuch as the gulf between the two languages is far greater, and with each generation of teachers and taught the instruction will become less efficient and the effort to learn more languid.

Before very long the little will become less and India will drop apart into language areas whose inhabitants will have little care or interest for what lies veiled by a strange speech. The one hope of Indian unity lies in the bond of a common language. It is rare to find patriotic devotion to a country unless there is, in addition to the home-tongues, one language understood by all. In the Middle Ages when all educated people spoke and understood Latin there was a certain European unity and patriotism which has entirely vanished now that there is no common medium of intercourse. Except in India where the word has a technical connotation, no one would think of describing himself as "a European."

If India is to have any voice in the Empire she must remember that that voice must speak English. All the rest of the Empire uses that language, and so does the North American continent, the whole

world of Australasia and the greater part of Africa. Japan carries on half of its University education in English, and that though the fact that Japan has but one native language might make it seem natural that this should be used throughout. China is learning English with great enthusiasm, and now that the German language has ceased to be desired in the East, it seems probable that English will become the chief medium of communication in all progressive Eastern countries. India would surely not wish to be the only one uncomprehended and uncomprehending of the great Oriental nations.

But there are hundreds of millions of people in India, and these are at very stage of ability and attainment. We cannot pretend that all have the same intellectual needs or the same intellectual capacity. Though some education should be given to all, it is impracticable at the present time to give the same education to all. There are large classes of the community whose girls can at most spend a very few years at school. There are some to whom the acquisition of a foreign tongue is, if not a sheer impossibility, at least so difficult and so slow an attainment that it would leave room for nothing else. To such it is waste of time and energy to learn English. A good grounding in reading and writing in their own language, a knowledge of arithmetic sufficient for household affairs, and thorough instruction in domestic arts and, of course, a simple religious training is as much as should be attempted. Their descendants will move on to something more complex.

But at the present stage of Indian development it is important that every girl of average ability who can give twelve years to her education should be bilingual. There is no great hardship in this if the study of English is begun early enough and enough practice is given in the very first stages. Young children are the very best learners of foreign tongues and acquire unconsciously a correctness of pronunciation which is difficult of attainment later. But the native language should also have its place of honour and should be used as the medium of instruction in certain subjects. It might be used for Arithmetic, Domestic Science, Indian History and Religious Instruction. If English is used for the other subjects it ought to give practice enough to make it an easy and familiar language.

In the Colleges of S. India where four or five vernaculars are in use among the students it is inevitable that all the instruction should be given in English. But this need prove no hardship, for the subjects studied at College are almost entirely those which the student was accustomed to read in English at school.

But all this education of women must, as was said at the beginning, be regarded as provisional, and subject to modification by the educated Indian women of the future, as soon as such a class has been formed and given authority to direct the education of the girls of their country.

ELEANOR MCDUGALL.

CRITICAL IDEALISM AND THE ADVAITA VEDANTA.

A COMPARISON OF METHODS.

[V. S. stands for *Vedanta Sstras*, *Appearance* for *Appearance and Reality*, *Essays* for *Essays in Truth and Reality* and Dvivedi for that author's translation of the *Mandukya Upanishad* with Sankara's commentaries.]

It was a fashion in philosophy till lately to look upon Indian speculation as dogmatic in character. This supposed dogmatism has been claimed by admirors and adverse critics alike, the former extolling Indian philosophy for the very reason for which the others decry it. I am now referring primarily to the critics, favourable or adverse, of the method itself. There are, besides these, others who object to a system of philosophy because the conclusions are repugnant to them. The conclusions, according to these are hopelessly faulty and the method by which they are arrived at must at least be equally faulty. With these there is hardly any arguing. We can but thank them for teaching us the organic unity of method and results and pass on.

The Advaita Vedanta, the dominant school of philosophic thought in India, has suffered all the varying fortunes of criticism. While some of its most frenzied adherents expound it for the benefit of the world, as the doctrine of the abstract universal, there are other merciless critics who cry down this along with other forms of absolutism for this very same *vice* that it is based in the end on a doctrine of abstract identity. A few others claim that the conclusions would be satisfactory enough, but for the dogmatic method employed, while the opponents of these would have it that the method is all right, is perhaps the only valuable part of this system of philosophy, while the conclusions themselves are unacceptable. To arrive at any one opinion as satisfactory, out of such a mass of opinions, is not an easy task. The western scholar or the student who applies western methods is accustomed to a certain method of thinking. Any suggestion he may receive which will help him to look at Indian philosophy in the light of western metaphysics is to him invaluable. But the ever-present defect of an analogical argument is that it may mislead, being based on non-essential resemblances. Our own students will be discharging

an important though comparatively insignificant, duty by constantly keeping on the lookout for such unsound analogies, correcting them wherever they exist, and suggesting *aperçus* wherefrom the westerner can obtain a more profitable and more satisfactory view of our philosophic systems.

The *Advaita Vedanta* has suffered through unsound analogical views. It has been compared by some with pantheistic or abstractly monistic systems of the west; and since these are condemned, it follows in their minds that it should be condemned also. Of course, a good many of those who effect such comparisons are either unsound scholars or unsound philosophers or both. From the failure of Spinozism, they jump to the inevitable failure of absolutism, or if they do believe in absolutism of a sort, they fail to see the essential resemblance between this and the *Advaita*. Nor is this unsoundness confined to hostile critics like Gough. Well-intentioned scholars like Deussen do us a great disservice when they compare this system to Kant's. Kant, no doubt, was a great philosopher in his day; and if the truth were known, few of his critics yet understand his real greatness. But nothing can be a more effective condemnation of the Vedantic Brahman than a comparison of it to the Kantian Thing-in-Itself; for in whatever Kant's greatness may lie, the doctrine of the Thing-in-Itself certainly does not contribute to it. The present writer believes that the *Advaita* philosophy is substantially the same both in method and results as what now has so much vogue in the west as critical idealism; he believes that to look at the Indian system through those idealist spectacles will certainly help to a more correct appreciation of that system than has hitherto been reached. The full exposition of critical idealism is a task beyond the limits of any single paper. It is proposed to take up only one of the leading expositors of that system—F. H. Bradley—and compare in this paper the methods of Bradleian and Vedantic idealism. The identity of results is perhaps more remarkable than the identity of method, but for this very reason we do not consider it here. The correctness of a man's beliefs is not by itself a guarantee of the validity of his thinking, for the beliefs may be grounded on irrational acceptance of tradition: what has come to be accepted without strenuous thinking may be abandoned as easily. It is in method that the two systems are strongly contrasted, and it is to the elucidation of the substantial resemblance in method that this paper is devoted.

Advaitism and critical idealism are both monistic. The real is the One, the Absolute; anything like duality in any realm stops short

of the ultimate. Ultimate duality is intolerable to both systems. This being the case reason, which is our guide in metaphysics, may not be looked down upon, condemned or subordinated to some other faculty. For from this would follow either the self-condemnation and suicide of reason or an ultimate duality of faculties, a duality fatal to any monistic conclusion. Critical idealism, therefore, should not and generally does not condemn reason. *Advaitism*, however, does not seem to recognise this. We find throughout *Vedānta Sūtras* a fairly explicit condemnation of reason and an exaltation of some other kind of knowledge which is intuitive. This provides the most marked contrast between the two types of Idealism. Allied to this is another point of contrast: this supreme knowledge has been intuited by the *Rishis* and handed down to the rest of humanity, so that it is our task now only to do our best to understand what the *Rishis* have left us. This is dogmatism. So then, whatever may be the identity in results, irrationalism and dogmatism would seem to constitute a substantial difference in method between Bradleian and Vedantic idealism.

We may profitably consider the charge of irrationalism first. Is reason adequate to complete knowledge of reality or not? If not, what is its function and how is it superseded? The most important passages in the *Vedānta Sūtras* treating the topic are II. 1 (6) and II. 1 (11). In both places, it is distinctly stated that reason should be taken as a subordinate auxiliary to intuitional knowledge contained in the Scriptures. Reasoning proceeds from characteristic marks. But of Brahman you cannot say it is characterised by this or that to the exclusion of other attributes; or else, you will be limiting Brahman.* In the absence of such marks, it is clear that inference and inferential knowledge are impossible.

Further, inference † is a purely formal process. You can start from anything and argue to anything else you like without any necessity for the conclusions being true. If the rigidity of the reasoning process were to guarantee truth, we should have arrived at truth long ago, whereas we find only different schisms and sects each pretending to be logical and each in conflict with the rest. This can only be, because in spite of the rigidity of their reasoning they start from wrong premises and do not know how to check either their starting-point or their results. We *Vedāntins* labour under no such difficulty. We admit the validity of reasoning within limits. We say, for instance, that because the waking and the dreaming states are mutually

* Cp. *Gaudapada, Karikas*, III. 26. and *Sankara's Commentary* thereon.

† V.S. II. 1 (11).

exclusive, the self cannot be present *as such* in either state ; or that, since the world emanates from Brahman, Brahman cannot be different from the world on account of the non-difference of cause from effect.* Reasoning is useful in disproving rival theories ; it is also useful as, to a certain extent, indicating the final truth ; but for the full comprehension of reality it is inadequate.

We might leave it at that, if *Advaitic* literature did not supply us with passages which seem to contradict the above conclusion. Thus for instance, in commenting on *Gaudapada's Karikas* III. 1, *Sankara* says "It is asked whether the *Advaita* is to be taken as proved only on the evidence of the *Srutis*, and whether no reason can possibly demonstrate it. This chapter, therefore, shows how the *Advaita* can be demonstrated by reason."† The whole of this chapter of the *Karikas* is devoted to demonstrating the *Advaita* by reason.

On the original doctrine, it would follow that since reason is inadequate, the only way of knowing *Brahman* is by doing all that is enjoined in the Scriptures. Since at least parts of the Scriptures enjoin sacrifices, etc., the performance of such *karma* would have to be taken as the only means of realising Brahman. This is a conclusion diametrically opposed to *Advaitism*. The performance of *Karma* is not merely not the only way of realisation ; it is not a way of realisation at all. The man who wants to become identical with *Brahman*, must follow the path of knowledge, not of action. This is the *Advaitic* doctrine as laid down in the *Bhagavad Gita*.

What are we to conclude from this ? That *Sankara* contradicts himself, or that he believes in two faculties of knowledge—one intuitional and another ratiocinative ? Neither conclusion follows. True, *Sankara* believes in knowledge which is not merely inferential, but this is not due to a different faculty. It is knowledge arising from the exercise of the same faculty when properly trained by a spiritual preceptor and instructed in the *Vedanta*. The purpose of such instruction is to give reason some genuine material to work upon and not go round in a circle of formal consistency. By the proper exercise of Reason the *Rishis* attained perfect self-knowledge, and they have communicated to us their knowledge through the *Vedanta*. This knowledge being knowledge of the perfect *Brahman* is eternal, and if our reason works on such material it cannot go wrong. The conclusions of the *Rishis* are of the nature of axioms or self-evident truths and they are immanent in reason itself.

* V.S. II. 1 (6); Thibaut, I.

† Dvivedi, p. 59.

If they were not thus immanent, *Brahman* being devoid of characteristic marks, it would follow that knowledge of the real is completely impossible. No such fears need trouble us, however. The knowledge of the real is present in the knowledge of every object of experience; only it is present there along with so much impurity created by *avidyā* (ignorance), and what the study of the *Vedānta* helps us to do is to remove this impurity. The real is present in everything. But if each thing is taken to be real in itself, we fall into error, being deluded by ignorance. The things themselves, if properly known, reveal themselves as appearances of the One. When *avidyā* is removed and proper apprehension comes in *Brahman* is seen to be self-evident. It requires no demonstration, no inference through characteristic marks. The study of the *Vedānta* has for its object the creation of right knowledge; but to this end it does not do away with reason, for such knowledge is immanent in reason.*

To the man who knows *Brahman*, there can be no re-birth, for birth and death are to him but illusory. Final liberation, therefore, can be attained only by the knowledge of *Brahman*. If the Scriptures say liberation can be attained by works, then so far they are wrong and we shall have to interpret them in such a way that they do not appear wrong. We shall have to say that that part of the Scriptural teaching is intended only for the unenlightened. For, if and so far as the Scriptures merely contradict experience, they cannot be ultimately true. That 'fire is hot' is a matter of experience; and if Scriptures say that 'fire is cold' so much the worse for them, unless we can reinterpret the saying successfully so as to save them. In the same way, it is matter of experience that if the causal chain of act and result be taken as ultimate, the chain cannot be abruptly snapped at any stage. You can get out of it only if you have sufficient ground to think that the causal chain is *not* ultimate. But it is absurd for you to say, "If I go on acting, I am sure the chain will come to an end sometime and I shall be liberated." This kind of belief is suited only to people of dull intellect whose only conception of liberation is, perhaps, enjoyment in another life. For those to whom life itself is misery the only way of salvation is knowledge which will help us to regard the causal chain as illusory. A thousand texts cannot prove that fire is cold; nor can they prove that an ultimate causal chain can ever come to an end.

You may ask at this stage, if we refuse to admit the authority of Scripture in some matters, on what grounds do we accept that authority in the case of *Brahman*? Because, we reply, in the case of

* Cp. *Saṅkara's Commentary on the Bhagavad Gita*, XVIII. 50.

knowledge within experience, there is possibility of scriptural statements being contradicted, as *avidya* is not yet removed. But in the case of *Brahman*, when there is no *avidya*, the possibility of contradiction cannot arise. In other words, knowledge of finite things is always conditional on a region of *avidya* or ignorance. But *Brahman* by its perfection *ex hypothesi* excludes the possibility of *avidya* in the knowledge of itself. Knowledge of *Brahman* is not dependent on an Other. Hence the Scriptures may be taken as authoritative in the case of *Brahmavidya*.*

Perhaps we can now see why reason as such is not adequate to the knowledge of *Brahman*. This knowledge is that which leads to final liberation. He who knows *Brahman* is *Brahman*. But *Brahman* is not reason alone, it is other aspects of experience as well. Complete knowledge of *Brahman* would therefore mean a self-transparency of all elements of experience, reason being included as one element. If knowledge means this, then reason is certainly inadequate for such knowledge; it has to be "corrected" as Bradley says by other aspects of experience. The *Rishis* who realised *Brahman* attained complete knowledge, not ratiocinative knowledge alone; and this complete knowledge they have transmitted to us, poorer mortals, as the *Vedanta*, with which we have to supplement mere reason.

It will be seen from the foregoing account that it is fairly difficult to substantiate a charge of irrationalism against Sankara. It may, however, be urged that the doctrine we have just expounded is the one which is criticised as irrationalistic and that the charge is based on a full knowledge of Sankara's doctrine and not merely on isolated passages from the *Sutras*. It is at this stage that a comparison with Bradleianism is likely to prove fruitful.

Let us see what he has to say about the function and value of thought. Thought is ideal, he says, not real as such, since it is in the relational form. It is an attempt to hold apart separated aspects of experience, the content from the form, the *that* from the *what*, and yet somehow to understand them in relation. Thought involves another distinction over and above this, *viz.*, the distinction of the knower from the known. In so far as genuine knowledge increases, this contrast is bound to decrease. But with the vanishing of separation and the birth of sympathetic insight, we become increasingly one with absolute experience and rise beyond the level of merely discursive

* *Sankara's* commentary on the *Bhagavad Gita*, XVIII. 66. See pp. 469 and 470 of the English translation by Mahadeva Sastri. Compare with this passage Bradley's discussion of absolute and conditional truth.

thought. Thought as such cannot attain to the absolute, but the latter is the fulfilment of the former; for the absolute is not one thing standing over against another, but the only real which includes all things harmoniously within itself.

The object of thought is the attainment of truth, and this it succeeds in attaining according as it is more or less faithful to reality, *i.e.*, according as it is more or less harmonious. There are then degrees of truth. The recognition of such degrees would be purposeless, if in the end thoughts should be incapable of giving us knowledge of the real. This is not Bradley's view. Thought no doubt falls short of reality, but this is not to confess thought's absolute bankruptcy. It is usually believed that there are only two alternatives—either thought is adequate to the comprehension of reality or it is hopelessly inadequate. The possibility of a *via media* is not recognised. This is a mistake. Reality is supra-rational, just as it is supra-relational; it *is not*, however, *irrational*.

Bradley distinguishes between conditional and unconditional truth. The former relates to individual things, the latter to the absolute. Since, however, even the latter is not co-eval with the absolute, it also would be liable to supplementation and correction. Yes, says Bradley, but there is still a valid distinction between conditional and unconditional truth; for the former is intellectually corrigible whereas the latter is not. If we say 'cows are white,' it would be a conditional truth since further knowledge based on judgments 'cows are black, brown, etc.' will increase our present knowledge. In the case of the absolute there is nothing outside it to be known, nor is there any superior faculty of knowledge wherewith it may be known. This unconditional truth is not liable to intellectual supplementation.

May not the theory of the absolute be itself a conditional truth, and as such liable to be upset by increasing knowledge? No doubt, our knowledge of the absolute experience will become more detailed, but our knowledge of the general nature of reality that it is absolute experience will not be upset. For our knowledge of particulars may always be modified by knowledge of other particulars related to them; but for reality there can be no Other beyond itself. The finite is always passing beyond itself, but there is nothing which the infinite can pass into; if it did so pass it would not be infinite. With increasing knowledge, we may be able to comprehend more and more fully the internal structure of the absolute. But no increase of knowledge could upset our conclusion as to the systematic or consistent

nature of the real, as such knowledge would defeat itself. Self-contradiction would become the ideal of knowledge, which is absurd.

In comparing the two philosophers, we would draw special attention to this treatment of unconditional truth. Bradley's treatment is closely parallel to Sankara's argument noticed earlier about the non-existence of *avidya* in *Brahman*. Knowledge about *Brahman* cannot but be true fully and finally; for, *ex hypothesi*, it is all that is, and our knowledge of that is not likely to be upset by further knowledge. Knowledge of the absolute is unconditional, says Bradley, for the absolute is its own Other. The parallelism thus clearly exhibited points to a substantial identity of thought between critical Idealism at least of the Bradleian variety and *Sankara's advaitism*. If the one is irrationalistic, so must the other also be; and irrationalism need no longer be levelled as a special charge against eastern or Indian speculation.

The two philosophers agree on the inadequacy of reason or thought. Both make a distinction between knowledge which can be within *our* experience and knowledge beyond that experience. Both believe that absolute truth as merely truth has to be supplemented before it can be full knowledge of the absolute. We would only point out that the similarity is in the defects as well as in the merits. *Sankara* conceives reason as just that faculty which syllogises. That this faculty is itself condemned by reason and that reason must therefore be more than this is an objection to his theory which he himself recognises * but does not answer. The parallel assumption of Bradley's is that thought is merely discursive, that as thought it is inadequate to the full comprehension of Reality. The difficulty with him is the same. If thought is really inadequate, how can we think of its inadequacy? Bradley is conscious of this; that is why he sometimes identifies truth and reality.† But he very soon wakes up to the requirements of consistency and treats truth as an appearance. If we should be asked whether these inconsistencies shout not discredit the two systems, we reply in the negative. In speaking of the absolute and knowledge of the absolute, it is difficult to avoid slight inconsistencies; for whatever thought is, speaking or writing is certainly in the relational form. We have to make hard and fast distinctions and stick to them, so far as we can, though such

* V.S. II. 1 (II), *Thibant* I. p. 815.

† This is what seems to be implied in such statements as "truths are *true*, according as it would take less or more to convert them into *reality*" (*Appearance*, p. 863); "the satisfaction which is more *true* and more real is *better*" (*Appearance*, p. 411). The italics are ours.

distinctions have no claim to be, in the end, real. The preservation of such distinctions may give an appearance of inconsistency, but their abolition may lead to intolerable confusion. It is as well to keep the distinctions, so long as we can get behind them to the genuine thought implied.

We have so far tried to show that reason is never discarded by the *Vedantin*, that it is used as a means to complete knowledge, though complete knowledge can never as such be merely rational. Reason is not sublated, but attains its fruition in complete knowledge though it, as such, is not present therein. We have also tried to show the similarity between the Bradleian conception of thought and the *Vedantic* conception of reason, a similarity which extended both to the merits and defects of their doctrines. Such a similarity should make us pause before we can accept as final a fundamental divergence of method as there seems to be between the two systems. We shall, therefore, inquire a little more in detail what Bradley's method is.

Why Bradley should call his method *ideal* experiment* we do not know. In its essence, it is not different from the experiments of the scientist. Certain facts are observed and their tendencies noted, and in the end a law or a formula is made to explain the facts. Even when the scientist is experimenting with concrete things, his experiment is not confined to those things: his mind is working on all their known attributes, trying to make out some intelligible relation among them. It cannot be said, therefore, that Bradley's experiment is ideal as he experiments with ideas, whereas the scientist experiments with things, for the latter too experiments with ideas. Perhaps Bradley used 'ideal' only to explicate what he means by experiment; he may not mean to distinguish ideal experiment from other kinds of experiment.

Let us now look at what we know of the Bradleian absolute. The absolute is individual, it includes appearances and is present in appearance in varying degrees. It can be shown with little or no difficulty that all these results flow from or are different ways of expressing the one fundamental truth—reality cannot be self-contradictory. To say that it *cannot* contradict itself is to say that there can be nothing to make it self-discrepant from without or within; to say, in other words that it is inclusive and harmonious or that it is individual. It follows from this that appearances cannot be outside of reality, and since appearances as such are more or less self-discrepant, it also follows that they cannot all as such be real. They

* *Essays*, p. 811.

must be transformed and in varying degrees. Our conclusions about the absolute, therefore, are in the main exhibitions of the same principle, one may almost say 'deductions' from the principle. We shall not, however, use the term deduce, as this has a purely formal syllogistic significance, and our knowledge of the absolute, whatever else it is, is not syllogistic, for, to say the least, from one premise you cannot have a syllogism. Granted, then, that reality cannot be self-contradictory, we can without further trouble know all that we *can* know about reality.

We contend that this principle which has to be taken for granted is of the nature of an axiom. We cannot have this principle given to us through the examination of experience. We cannot say, for instance, that on examining any piece of thinking it is found to be not self-contradictory and that, therefore, reality cannot be conceived to be self-contradictory. No doubt, we find it exemplified in experience that what contradicts itself destroys itself and can be neither permanent nor real. But we do not get our principle from observation of cases and generalisation from these. The principle is presupposed in our very observation. We could not observe or think to any purpose if we had not this principle ingrained in our being. It is, no doubt known *in* experience, but it is not known *from* experience as, for instance, the truth that water is H_2O is known. Indeed, it may be said, if we had to generalise from experience, it is possible to conceive reality as being self-contradictory, for we do find contradictions within our own experience. The one reason why we look beyond these contradictions is that we know already that contradictions cannot be ultimate, that reality cannot be self-contradictory. This principle is self-evident, it is not known by experiment, ideal or otherwise, but is the indispensable presupposition of any experiment; in short, it is an axiom. And it is this axiom which is at the root of Bradley's doctrine of reality.

We do not see any reason why Bradley should fight shy of this conclusion. When his critics object that the absolute is deduced from an axiom, the best reply would be to take the bull by the horns and ask, "What if?" An axiom is a self-evident principle and it could not be self-evident if it belied experience. This being so, what objection could there be to conclusions deduced from such a principle? Such critics somehow conceive the realm of logic as lying outside the realm of experience; conclusions logically coherent may nevertheless prove inadequate to experience. Life is more than logic; our experience, as James used to say, overflows and surrounds our miserable

categories. This conclusion may, to a certain extent, be true; it is possible to have formal consistency without truth. But that, in the end, logic can be true to itself without being true to experience is inconceivable. Formal consistency is, after all, not the end and aim of logic, any more than such consistency is the ideal of thinking. The end of one as of the other is truth, which is more than absence of contradiction. If Bradley had for his criterion of the real, the principle of formal consistency, and evolved a system of metaphysics therefrom, the critics would be justified in their attacks. But this is not his criterion. The principle of coherence or the impossibility of contradiction is different from that of formal consistency. Any conclusion which is only formally consistent is intellectually corrigible; one which is coherent is perfect so far as intellect can be perfect, *i.e.*, perfect enough for metaphysics. The better course, then, for Bradley or the Bradleian is to show how the axiom which Bradley does start from is a quite satisfactory principle, in fact, the only principle from which any one could start. Such a course would disarm objectors more effectually than Bradley's defence of his method as ideal experiment.

This conclusion of ours about Bradley's method, that it does start from an axiom, helps us in two ways. First, the difference in method between Bradleianism and *Vedantism* looks much less than what it seemed. Bradley's axiom, it may be said, was conceived by the Indian *Rishis* in a slightly modified form, that Reality must be one. This axiom they elaborated in the *Upanishads* with a wealth of detail and illustration. One of the *Rishis*, *Vyasa* (or *Badarayana*), to lighten the task of memorising, wrote a compendium of *Upanishadic* teaching, and styled it the *Vedanta Sūtras*. The task of *Sankara* was to expound the *Sūtras* in consistency with the original teaching as elaborating the principle of identity. Reality is one. If the principle were construed as enouncing abstract identity, it would be absurd and in the end self-contradictory. Reality does not exclude, but includes appearances as illusory manifestations of itself. This doctrine is part of the *Upanishadic* teaching, but is fully expounded by *Sankara* as his doctrine of *Maya* (illusion). Bradley starts with the axiom of non-contradiction, the *Vedāntin* with the axiom of identity; the conclusion, in both cases is the same, the conception of reality as a concrete universal. Is it not evident from this that even in method there is a great similarity, not a divergence?

The *second* way in which our conclusion about Bradley's method helps us is that it enables us the better to answer such criticisms of

Bradley as those urged by Prof. Pringle-Pattison.* It is said, for instance, that Bradley has no difficulty in swallowing at a gulp, in the case of the absolute, what he had found unintelligible in appearance. Identity and difference, unity and diversity, permanence and change—concepts the realisation of which Bradley could not understand, are by him said to be *somehow* reconciled in the absolute. If you can never know *how*, why not believe that the reconciliation happens *somehow* in the case of appearance?

The answer to this is plain. Reconciliation cannot be *somehow* in the finite, for the finite can show no principle of reconciliation. In the end, it can only leave conflicting elements side by side, not resolve them into a unity. And even if it did, its unity, being finite, is liable to disruption from without. We do not say the finite does not to our knowledge harmonise conflicting elements, but that, *being finite*, it cannot harmonise. The necessary condition is infinitude and unity and this we call the absolute. If the finite could be intelligible and it is only our intelligence that fails, our critics would be justified; but our contention is that the finite *cannot* be intelligible, and this has yet to be disproved.

What lends colour to such a criticism is the impression a casual reader may entertain that Bradley has discovered reality in a far-off land, a being that is free from the blemishes of our finite experience. If Bradley did really advance any such theory, it would be right to ask him why he should assume such a reality, which cannot fully explain anything, a defect which it shares with appearance. But such is not Bradley's conclusion. The impression that it is his conclusion is very natural, because of his talk of ideal experiment. If a scientist condemned an existing hypothesis and advanced a new one on which things were still unintelligible, the new hypothesis would unhesitatingly have to be condemned also. But Bradley's conclusions do not belong to the realm of conditional truths like scientific hypotheses. They are absolutely true; they are not the *result* of experiment, but the *pre-suppositions* of experiment. They may not make things fully intelligible, but they may not be condemned because of that; because, condemning them, you condemn knowledge itself. There is nothing we have said here, which Bradley does not himself say somewhere or other. And even in using the term 'experiment' we are sure he meant right, that he meant a process which would exhibit its own presuppositions clearly. But in view of the current misconceptions about deduction, induction, experiment, etc., we wish he had not talked of his method as experimental at all.

* *Man's place in the Cosmos*, Ch. IV. pp. 118, 117.

It may still be said that after all Sankara is not content with intellectual demonstrations and that to that extent he is irrationalistic. If Sankara does really believe in reason why should he bother to appeal to Scriptures at all? A question like this ignores the historic setting of Sankara's teaching. Anti-idealistic theories were rampant in his days, and these theories based themselves sometimes on scriptural authority and at other times on appeals to reason. In the latter respect they are comparable to the "rationalistic" theories of to-day. A system like the *Sankhya* for instance, based itself both on reason and the Scriptures. In refuting the system one should not content oneself with merely cutting away one foot but should seek to disable the adversary permanently. Hence the appeal to the scriptures. But would not a mere appeal to reason be good enough for wise men? Perhaps so; but the *Vedānta*, though understood only of the few, is not intended for the benefit only of the elect. The masses may not see the right path clearly yet, but they should at least be guarded from going wrong.

This historical justification is not fully convincing to some. In so far as there is any appeal to Scriptures at all, Sankara's work seems in their eyes to lack philosophic value. Our answer to this is that the objection would be fully valid if Sankara juggled with the two appeals making up deficiencies in logic by scriptural authority. This, however, he cannot be charged with. The conclusions of reason are reinforced by reference to scriptural authority; the one does not seek to take the place of the other. I have Mr. Bradley's authority for saying that, in his opinion at least, such an appeal, whose aim is not substitution but supplementation, will not be out of place in the mouth of a philosopher. So that even on this last point there seems to be little difference between western critical idealism of the Bradleian variety and the *Advaita Vedānta*. This agreement in method can be brought out far more clearly in the light of some far more interesting analogies in the conclusions of the two systems. The Bradleian theory of judgment and the doctrine of degrees of truth and reality find very close parallels; but these do not come within the scope of this paper.

S. S. SURYANARAYANAN.

Note.—Mr. V. Subrahmanya Iyer of Mysore has two articles, one in *Sanskrit Research* for July 1915, and another in the *Indian Philosophical Review* for April, 1918. The latter had not appeared at the time the above views were reached. The former came to me as a messenger of hope when I was with much difficulty working out the analogies above-noted with a view to establishing the conclusion which he and I seem to hold in common, but about the reception of which I was then in great trepidation. In one thing, however, I am sorry to have to disagree with Mr. Subrahmanya Iyer. He claims in the later article that the Vedāntic conception of reason is superior to the western conception, inasmuch as the latter is confined to syllogising. But this, as we have noted, is not correct. Idealists in the west feel that reason must mean more than mere syllogising, though at times they seem to identify the two. But why should we fall foul of them when Sankara himself talks of reason as that which proceeds through characteristic marks?

THE CANADIAN KHAKI UNIVERSITY.

THE educational work among the Canadian Overseas Forces during the great War was an extremely interesting and valuable experiment. Sporadic attempts had been made in the early years of the War to give instruction in the shape of popular lectures to soldiers in rest and training camps in England and France and this work had, close behind the fighting line, been organized into the so-called "University of Vimy Ridge" which owed its inception to the vigorous personality of Captain (afterwards Colonel) E. H. Oliver, one of the educational leaders of the Canadian West. This work, was, however, admittedly of a tentative and popular character and served as a means of keeping the men intelligently employed during periods of rest rather than as a means of educational discipline.

It was not till the summer of 1917 that the Canadian Military authorities decided to investigate the possibilities of a serious educational campaign among the Canadian Troops. For the purpose of carrying out this investigation they chose Dr. H. M. Tory, President of the University of Alberta and a distinguished Canadian Educationist. After a study extending over several months Dr. Tory formulated a comprehensive educational programme which was brought into effect during the year 1918 and which extended throughout the period during which Canadian Troops were retained in Europe. For carrying out this programme the Canadian Government set aside the sum of \$ 500,000.

The educational work undertaken covered a very wide field. It included instruction which would ordinarily be given in the higher grades of primary schools, special training in Book-keeping, Type-writing and Business subjects, work in preparation for the University and University training itself. As a very large number of Canadian Troops were expected on demobilization to engage in Agriculture and as the Canadian Government were offering very exceptional facilities to such men, a great deal of attention was naturally paid to Agriculture and its allied subjects.

Some idea of the magnitude of the work can be gained from the fact that over 50,000 men were under instruction during the latter half

of 1918 and the first half of 1919. Many of these men had been out of school for years and it would be hard to estimate the amount of good that must have been done and the effect this work will have on the life of the country during this generation.

I wish to deal more especially with the higher educational work that was carried on, as it was with it that I became more particularly familiar. A large number of the Canadian Forces had enlisted straight from High School or College. Many of these men had been away from their studies for four years and not a few had practically given up all thought of returning to them. The loss of these, the best of Canada's rising generation, to higher education would have been a serious thing indeed. English Universities could accommodate but a few hundred of those qualified to take higher studies and what seats were available in them were reserved for men whose studies had been fairly far advanced before they enlisted. There remained a large number of men who were just ready to enter a University or who had completed one year only, whose needs had to be met in another way. It was therefore decided to organize a temporary University in one of the large camps in England and the camp at Ripon in Yorkshire was chosen for the purpose.

Before any practical action could be taken, however, it was necessary to ascertain from the various Canadian Universities how they would view such a scheme. This was easily done because nearly all the Canadian Universities were represented on the directing body of the Educational Service. The Universities without exception agreed to accept the training given at the Khaki University [extending over approximately six months] as the equivalent of a year's work in a Canadian University.

The work commenced in January 1919 and continued till the middle of July. Only those who have had to do with work in a military camp will realise the difficulties that were encountered. Some conception of it may be perhaps obtained from a short account of my own experiences.

When I arrived in England in January I was informed that I was to take charge of biological instruction in the University. As there had been no one at head-quarters conversant with the needs of a biological department no arrangements had been made with regard to the purchase of apparatus, supplies or books. Biological courses had to be arranged for first and second year agricultural students, first year medical students and first and second year Arts' students. General biological supplies were very difficult to obtain while microscopes, without which no serious practical work could be attempted, appeared to

be almost unprocurable. But my difficulties really began with my arrival at Ripon. All work had to be done in the ordinary army huts which, to say the least, did not lend themselves readily to equipment as laboratories. My first lecture was delivered the day after my arrival in a cubicle of an army hut and in the dozen odd cubicles of the same hut similar lectures were proceeding at the same time. The partitions separating the cubicles were made of thin asbestos boards which extended upwards to a height of about seven feet. A few benches, a table or so and a black-board about two feet square were the furnishing of the 'lecture room.' Laboratory accommodation was even more difficult to obtain. At last I had handed over to me two rooms in a drying hut. For the benefit of the uninitiated I may say that a "drying hut" is a hut used for the drying of soldiers' clothes. These rooms were badly lighted and were bare of any furnishings so the instructors and the students had to turn themselves temporarily into carpenters. I purchased lumber and nails, borrowed a couple of hammers and a saw and within a day the laboratories were furnished. Equipment came gradually. Microscopes of every imaginable type were gathered one by one. Supplies were gathered from all over England and within a month we had quite respectable though much overcrowded biological laboratories. The Physics and Chemistry Departments had the same difficulties to overcome and overcame them in much the same way.

The work itself was of extreme interest. There were men who had been through the most terrible experiences which men have ever been called upon to face. They were suddenly released from being minute cogs in a mighty war machine and were turned to the severe mental discipline of studies the memories of which must have seemed to them as belonging to a previous existence. The thirst for knowledge which they displayed was a revelation to me and the cheery way in which they met the discomforts and the difficulties with which they were faced made me inexpressibly proud of my countrymen and the land which bred them.

Two things have been impressed upon me by my work in Ripon as never before. One of these is the comparatively insignificant part University Buildings and equipment play in the development of mind and character. The other is the importance of educational work among men who have passed what is generally considered the school age. Many of the men in the classes at Ripon were well over thirty while some were over forty. They had been away from school for years and it had taken a world war to impress upon them the necessity of equipping themselves as fully as possible for the struggle of life.

I found these mature men, on the whole, much more eager to learn than younger students who had been away from school not more than one or two years. The really unsatisfactory students were almost entirely confined to those men who had joined up late and had seen no fighting at all.

That the Canadian Government have been impressed by the importance of adult education has been shown not only by the educational organization among the troops in Europe of which I have given only a slight sketch but even more markedly by the extensive preparations which have been made for continuing this work on the return of the troops to Canada. Every effort is being made to facilitate the continuance of studies and where men are taking to Agriculture arrangements are being made to give them the training which is essential to success. I can hardly believe that this work will stop with the training of returned soldiers and I can picture for the future a great organization of Universities and Colleges and Secondary Schools throughout the land in the interests of adult education. It has been difficult for some of us to discover any good as likely to result from the great War. Perhaps Canada, at least, may discover here a gain which will compensate her for all her sacrifices.

LESLIE C. COLEMAN.

THE PHILOSOPHY OF RABINDRANATH TAGORE.*

PROFESSOR S. Radhakrishnan's work on Rabindranath Tagore's philosophy is valuable and interesting both in itself and on account of the subject. It is animated by a lofty enthusiasm for lofty things and reveals clarity of vision and clarity of presentation. Professor Radhakrishnan says in his preface about the scope and aim of his work that "the book explains itself." Indeed, though a cynic has defined philosophy as "putting what everybody knows in language which nobody can understand," this definition applies as little to Professor Radhakrishnan's exposition of Tagore's philosophy as to Tagore's philosophy itself. He says in his preface about Tagore in relation to India and himself in relation to Tagore, "In interpreting the philosophy and message of Sir Rabindranath Tagore, we are interpreting the Indian ideal of philosophy, religion, and art, of which his work is the outcome and expression. We do not know whether it is Rabindranath's own heart or the heart of India that is beating there. In his work, India finds the lost word she was seeking. The familiar truths of Hindu philosophy and religion, the value of which it has become fashionable to belittle even in the land of their birth, are here handled with such rare reverence and deep feeling that they seem to be almost new. My acquaintance with the soul of India from which Sir Rabindranath draws his inspiration has helped me in the work of exposition."

It is a truth well-known to all that poets are never philosophers with a set purpose or system or design. Their philosophy bears to their poetry the same relation that thunder bears to lightning, though these have the same august truth. Their illumination of emotion is vivid and instantaneous. Their suggestive reference to the thought-side of things comes at a slower pace and with muffled expression. If poesy aims at a system of philosophic thought, she will merely lessen the magic of her charm without adding to the prestige and power of her message. Systems of thought come and go, but poesy goes on for ever. Matthew Arnold tells us in one of his memorable crystalline

* *The Philosophy of Rabindranath Tagore*, by S. Radhakrishnan, Professor of Philosophy, Maharaja's College, Mysore.—MacMillan.

utterances that "poetry attaches its emotion to the idea." Poesy is the best philosophy in that it lifts us into moods of reverence and mystery and effects a conversion of the heart which is the best revealer of the truth of things.

"She comes like the hushed beauty of the night
That looks too deep for laughter :
Her eyes are a reverberation and a light
From worlds before and after."

In India, where fortunately many things which God put together have not been put asunder as in some modern civilisations, spiritual philosophy, which has itself from the time of the Upanishads been not "harsh and crabbed" but "musical as is Apollo's lute" and "a perpetual feast of nectared sweets," has kept company with the splendour-winged and tuneful-throated Indian poesy in its ethereal flight with "pride and ample pinion"

"Sailing with supreme dominion
In the azure deep of air "

of Indian culture. Indeed some of the finest poetic intuitions expressed with the natural magic of true poesy are to be found in the Upanishads, to which Tagore returns again and again with ever renewed delight, and which are the inspiration of his song. I have in my forthcoming second volume indicated his relation to Indian philosophy with a degree of fulness which I dare not attempt within the limited scope of a review.

Professor Radhakrishnan shows at the very outset that Tagore is a poet and that philosophy is with him not artificial and purposive but natural and spontaneous. He says, "It is a sight of the soul rather than a reasoned account of metaphysics; an atmosphere rather than a system of philosophy. But we feel that the atmosphere is charged with a particular vision of reality." He then starts his investigation of Tagore's philosophy with the exposition of Tagore's view about man in himself and man in the world of phenomena. "As a link in the natural chain of events, man is subject to the law of necessity; as a member of the spiritual realm of ends, he is free." Tagore's solution is the Indian solution of the unity and perfection of things, of that Divine Immanence and Transcendence the realisation of which is at once the crown and the joy of life. Tagore points out in *Sadhana* that the Indian civilisation was born in forests and realised the kinship of man and nature in a bond eternal and divine. Professor Radhakrishnan says well: "The spiritual phases of nature leap up to his God-filled eyes, kindle devotion in his heart, and

set song on his lips." A great sentence in Tagore's *Stray Birds* says: "God finds himself by creating." The universe is the expression of His creative joy. Tagore says in *Sadhana*, "The lover seeks his own other self in the beloved. It is the joy that creates this separation, in order to realise through obstacles the union." The truth of the unity of man and nature in God is hence the primary and basic thought of Tagore's philosophy as of Indian thought in general. How is it to be realised? Not by mere intellect which analyses, classifies, and arranges. The universe of intellect "is like a railway station; but the station platform is not our home" (*Sadhana*.) Tagore says further in *Sadhana*: "The vision of the Supreme One in our own soul is a direct and immediate intuition, not based on any rational action or demonstration at all" (page 36). We realise him first in the Dark Chamber of the heart and then in the illimitable universe. Mystic institution is the only means of God-realisation. God is Supreme Beauty, Supreme Good, and Supreme Truth; and the realisation of this by intuition and spiritual emotion is the true glory and ecstasy of life.

Professor Radhakrishnan then points out how in Tagore the artistic and emotional aspect of Divine communion is the dominant mood, the regnant impulse. He says: "The poems of *Gitanjali* are the offerings of the finite to the infinite." He says further that Tagore's God is not a being seated up high in the heavens but a spirit immanent in the universe. Tagore describes in his *Sadhana* Realisation in Action, Beauty, and Love as the fulness of realisation of God. The means of such realisation is renunciation. Only then does the fulness of insight come. A great sentence in Tagore's *Fruit-Gathering* says: "Life dies into the fulness."

Professor Radhakrishnan draws our attention to Tagore's ideas about re-incarnation. The very first poem in *Gitanjali* says:

"Thou hast made me endless, such is thy pleasure.

"This frail vessel thou emptiest again and again, and fillest it ever with fresh life."

The twelfth poem says:

"The time that my journey takes is long and the way of it long.

"I came out on the chariot of the first gleam of light, and pursued my voyage through the wildernesses of worlds leaving my track on many a star and planet."

Death is hence not a negation or annihilation but an interruption which is a prelude to a higher newness. "It is thou who drawest the veil of night upon the tired eyes of the day to renew its sight in a

fresher gladness of awakening" (*Gitanjali*). "The child cries out when from the right breast the mother takes it away, in the very next moment to find in the left one its consolation" (*Gitanjali*).

Another important idea which Tagore has given us and which Professor Radhakrishnan emphasises is that we must effect a radical change of outlook to attain to the fullest measure of realisation of God. The senses should not be suppressed but should be impressed into the service of God. Tagore cries out:

"No, I will never shut the doors of my senses. The delights of sight and hearing and touch will bear thy delight."

Professor Radhakrishnan then proceeds to describe how according to Tagore "the God-possessed soul will open itself in the service of man." He says that "the infinite is not other than the finite, but is the finite transfigured." Another Godward quality—as important as service—is purity. A great poem in *Gitanjali* says:

"Life of my life, I shall ever try to keep my body pure, knowing that thy living touch is upon all my limbs.

"I shall ever keep all untruths out from my thoughts, knowing that thou art that truth which has kindled the light of reason in my mind.

"I shall ever try to drive all evils away from my heart and keep my love in flower, knowing that thou hast thy seat in the inmost shrine of my heart."

The work of the devotee will be full of peace and purity and power. He will not turn away from work or seek to use it as the servant of desire. Perfect service is perfect freedom. Professor Radhakrishnan says well: "The God-possessed souls are people who, like little children, are innocent, and do work for the mere joy of work, and live for the mere joy of life." They "make action a consecration and life a dedication to God. . . . The truly religious hero does the dullest deeds with a singing soul." It is through struggle that man attains his goal. Imperfection is a condition of progress towards perfection and self-sacrifice is the means of self-transcendence from imperfection to perfection.

Professor Radhakrishnan then proceeds to explain Tagore's conception of evil and suffering. He says: "It is out of love that God sends us suffering." Tagore says in *The Gardener*: "Love must be called from its play to drink sorrow and be borne to the heaven of tears." Professor Radhakrishnan then deals with Tagore's conception of sin. He says: "Sin is selfishness. It is the failure of man to be true to his real self. It is the revolt against the spirit in man.

the divine in him. It is the rejection of the all." It is egoism that leads to unrest and desire, to selfishness and sin. In individual and in national life it makes us mistake movement for life and velocity for vitality. Under its influence life becomes "force without direction, noise without significance, speed without accomplishment." Tagore however gives us the comforting assurance that "evil cannot altogether arrest the course of life on the highway and rob it of its possessions. For evil has to pass on, it has to grow into good; it cannot stand and give battle to the All."

I am however unable to understand why Professor Radhakrishnan suddenly descends into an unnecessary attack on Sankara. It is unwarranted by his treatment of the theme and by the subject of the attack. He says: "Between the stern philosophy of Sankara with its rigorous logic of negation and the ascetic aesthetic of inaction, and the human philosophy of Rabindranath Tagore, it is war to the knife." To bring together one of the world's greatest philosophers and a poet who has no philosophic system is itself impolitic if not erroneous in method. To treat them as antagonists is still more absurd. To describe Sankara's philosophy in the way in which he has described it is the most absurd of all. Professor Radhakrishnan speaks also of the Hindu's "individualism which fights shy of the world with its correlate of *Maya* developed." This shows as curious a misunderstanding of *Maya* as of the Hindu attitude towards life. The Indian doctrines of the Purusharthas and of the body as the primary Dharmic Sadhana, and the Indian socio-religious scheme, are based on the harmonising of the here and the hereafter. We have no right to sacrifice truth for mere flash of rhetoric or glitter of phrase.

In the third chapter of his work Professor Radhakrishnan speaks of Tagore's ideas about the inter-relations of poetry and philosophy and other kindred matters. He says that according to Tagore art is the pathway to freedom. The poet sets free the poet in us. Art is born of the spirit of joy that transcends the pains and limitations of life. "Artistic creation and enjoyment are both spontaneous and unconscious." It is the self-expression of personality. It aims not at instruction but at delight. A true poet has his message to the mind because his vision of the whole leads him to realise and reveal both truth and beauty. His life must be a poem for him to be a true poet. The rhythm of life passes into the rhythm of poesy. Melody on the tongue comes of melody in the heart. "Poetry is the echo in the human heart of the melody of the universe." It is not mere observation and imitation but is meditation and creation. It is a creative

reconstruction of experience. It is not photography but revelation. The poet's intensity of feeling leads to his perfection of insight and clarity of vision. Intimations of beauty and love and joy come to him from everywhere. "Art reveals the hidden spiritual ideal." It should surrender itself "to the spontaneity of the spiritual vision." It resides not in technique but in creative vision and inspiration which builds for itself perfection of form. Further, though poetry aims at beauty and philosophy aims at truth, we must remember that beauty is truth and truth beauty as the poet of beauty has told us. Tagore's mysticism is the meeting-point of poetry and philosophy. It is thought suffused by feeling and purified by contemplation; it is inner vision. In concluding this chapter Professor Radhakrishnan says well: "His poetry is at the same time a light that fills the mind, a song that stirs the blood, and a hymn that moves the heart. The voice of Rabindranath, vibrating with the passion of genius, and glorifying all his race, instils into the sinking heart of India faith in herself, faith in her future, and faith in the world."

Such in brief is the presentation of Tagore's philosophy by Professor Radhakrishnan. He cannot but feel however that it is inadequate as a presentation of philosophical concepts and as an exposition of Tagore's philosophy. Indian philosophy as well as western philosophy has a method of its own. Indian philosophy has a dialectic method and an expository method which have the rare merits of arresting attention, fairness of presentation of both sides, clear division of subjects, logical argument, clarity, and terseness. Unless there is a clear philosophical method there cannot be clarity of presentation or soundness of conclusion. Professor Radhakrishnan has however not followed such a method. A poet like Tagore in works like *Sadhana* and *Personality*, which are books of meditation, and in his poems, which go into the central shrine of beauty by the flowery zig-zag paths of sweet and elusive emotion cannot and will not and must not follow a philosophic method. But there is no excuse for Professor Radhakrishnan's exhibiting such a lack of method. In a great mystic poet's intuitions, expressed under the stress of poetic and spiritual emotion, there will be an unconscious, though not a conscious, method in mysticism, just as the riotous exuberance of nature is guided by unseen laws of compulsive might. Compactness and brilliance will come to his thoughts by the pressure and weight of the superincumbent sweetness of spiritual experience and fervour of poetic emotion, just as the superincumbent pressure of earth by some wonderful natural process makes carbon into the solid diamond with its

coruscating brightness. But we lesser mortals cannot tread where he treads. We must be humble chroniclers of his intuitions and watch and describe the sweeping curves and evolutions of the soarings of his thought in the bright empyrean of realisation.

We have no space in this review to present Tagore's philosophy in full, but we can certainly give indications if not a presentation. We must know first of all his conceptions about the categories of time, space and causation. He shows their true subjective aspects and their relation to the All. The second address in *Personality* gives us his clear and mature views on these vital matters. Philosophy is in fact the science of the infinite. We must know also his conception of the nature of knowledge. Man's pure and inalienable knowledge is his realisation of the infinite. We must then consider his ideas about the nature of God and soul and universe and about their inter-relations, and his further philosophical concepts about the origin and significance of life and love and death and the nature and causes and conditions of the realisation of the infinite in Action, Beauty, Love, and Joy. To quote from his *Personality*: "The whole object of man is to free his personality of self into the personality of soul, to turn his inward forces into the forward movement towards the infinite, from the contraction of self in desire into the expansion of soul in love.....Will has its supreme response, not in the world of law, but in the world of freedom, not in the world of nature, but in the spiritual world."

To establish one's name as a philosopher in India—the world's true home of philosophy and religion—is no easy task. Once, when some of his admirers told him that they regarded *Gitanjali* as equal to *Gita*, Tagore requested them to desist from such exaggeration and profanity. Tagore's philosophy suffers from various defects and limitations. His breaches with Indian philosophic traditions are not justified by the perfection of his scholarship or his perfection of logical skill and philosophic profundity. His exposition of *Isha Upanishat* in *Personality* is unfortunately not so correct or complete as we would desire it to be. He does not seem to recognise or value the fulness of the Indian scheme of *Sadhanas* or means of philosophic and religious realisation. Such a poem as the 11th poem in *Gitanjali* is beautiful but does violence to the inclusiveness and perfection of the Hindu spiritual consciousness by its onesidedness. The 43rd poem in *The Gardener* where he declares "I shall never be an ascetic" presents an inaccurate conception of Indian asceticism. But when all is said and done the whole world must bow with reverence to this great poetic genius who has reaffirmed the majesty of the spirit, who has revealed to us the beating of the

world's heart to the tune of love, and who has quickened in us a new life of spiritual sweetness and dowered us with a new affluence of spiritual emotion.

Professor Radhakrishnan's last two chapters describe Tagore's message to India and the world in realms of civic and political and social life. Tagore is a national poet to whom Indian is a goddess and patriotism is a consecration, a worship, a spiritual passion and ecstasy. He wants to build religious unity in India on the realisation of the Infinite amidst the cosmic dance of life and death. He has however wavered in his presentations of India's social ideals. It is impossible in this review to go into a detailed consideration of this controversial matter. But Professor Radhakrishnan has no excuse for his inadequate treatment of it. He shows in himself the flux and reflux of the views of Tagore on the matter. His presentation of Tagore's views on India's salvation being dependent on her preservation of her national identity is, however, clear and admirable. I have described elsewhere Tagore's vision of India's soul as self-revealed in Indian History. Professor Radhakrishnan says well: "Rabindranath demands a synthetic integration of the old and the new, the East and the West." The means to the attainment of this ideal is a wise and comprehensive scheme of national education. The modern educated man is an anomaly and an anachronism. Professor Radhakrishnan says well about him: "His voice is an echo, his life a quotation, his soul a brain, and his free spirit a slave to things." He is not a person but a shadow, not a natural blossom which is rooted in life but a cut flower. Tagore's Bolpur School is the incarnation of his educational ideas and ideals. Indian art and literature, Indian philosophy and religion, Indian history and sociology, Indian languages and culture, should be given full prominence in every sane scheme of studies in India. We cannot but regret however that Professor Radhakrishnan has merely copied Tagore's severe but untrue diatribes against Indian unworldliness and fatalism. He has however shown well that Tagore's political ideals are founded in his realisation of the need for the expansion of the national personality. God has entrusted Britain with the mission of relighting the lamp of India's political life. To fulfil this function, western nationalism must purify itself of its lust for territory and domination and exploitation. The political future of the world is in the hands of national democracies curbed and controlled by the League of Nations. We cannot conclude this review better than by quoting two beautiful prose passages and two passages of divine poesy from Tagore.

"As the mission of the rose lies in the unfoldment of the petals which implies distinctness, so the rose of humanity is perfect only when the diverse races and the nations have evolved their perfected distinct characteristics, but all attached to the stem of humanity by the bond of love."

"Man's abiding happiness is not in getting anything but in giving himself up to what is greater than himself, to ideas which are larger than his individual life, the idea of his country, of humanity, of God."

(*Sadhana.*)

"And give me the strength to surrender my strength to Thy will with love." (*Gitanjali.*)

"Now at the end of youth my life is like a fruit, having nothing to spare, and waiting to offer herself completely with her full burden of sweetness." (*Fruit Gathering.*)

K. S. RAMASWAMI SASTRI.

THE COMING CHANGE IN EDUCATION.*

A PRUDENT minister used to advise his parishoners never to move from their situation unless they had a push from behind and a pull from in front. This suggests the obvious criticism that it is well enough for a minister to give such advice which can generally be followed in the case of people in his position, but that sometimes in the case of others the push from behind is so vigorous that it matters nothing at all whether there is a pull in front or not. But old institutions are treated as considerably as ministers and therefore I adopt the above tale because our education system is in the position declared by that minister as the right one to precede motion: both the push from behind and the pull from in front are distinct and unmistakable. However considerably we are going to treat it, the time has arrived when it must be bowed out in Europe. The push from behind is fairly violent. Education has become universal, there is not a child allowed to grow up illiterate, but the general opinion is that it is a somewhat doubtful blessing in that it does not fit the children to earn a livelihood, and it not unfrequently unfits them, giving them a taste for sedentary instead of active occupations. In India where things have not advanced quite so far, the system is still condemned because it leads to disappointment. Parents make untold sacrifices for the education of their children, and often the successful graduate obtains no more pay than his comparatively illiterate brother, and very frequently remains unemployed.

That is merely the obvious condemnation, and those who look at things in the light of modern knowledge have a great deal more to say against it. In the words of the Royal Commission on physical deterioration, the young human being, up to the age of about 18, is in a "plastic" state and capable of being moulded for better or for worse. The important thing is not to give the young men or young women knowledge of the subjects, for which there is plenty of time, but, during these plastic years, to mould him or her in the right shape.

* See Editorial Note, on p. 207

Our common sense tells us perfectly plainly how that is to be done. We must occupy the children during these plastic years in work they are thoroughly keen upon and enjoy, and that calls forth the free, spontaneous and specially the joyful exertion of all their faculties. If we do that we develop in them an energetic mentality, disposed to learn, and that is the way to make them grow up cultured. Our present system which bores them so is poison to them during the plastic age.

That then is the push from behind of our present system which is conceived in ignorance and unsatisfactory, disappointing in practice on every point.

Now what is the pull from in front?

Industrial progress has given such an enormous productive power to labour, and especially has done so much to enable us to make great use of the most unskilled workers, that every economist now can see that we might make education self-supporting by employing the boys and girls in school for part of their time in producing certain goods, not for sale in the market, but to take to their homes for use there. Now these possibilities of self-supporting education open up a fascinating study, because they show us how every country even the poorest can have a good education system, and show us more than that, for self-supporting education would undoubtedly put us on the road to the solution of many of our great economic problems. It would lead to the reconstruction of our whole social system on the basis of co-operation. It is generally realised now by thoughtful educationalists that games well conceived and well organised, instead of being looked upon as a pastime, should be the most important thing in the educational programme of children—for the simple reason that there is nothing so well suited to interest them and call forth their greatest efforts and vivacity. Under the self-supporting system there would be no hurry to get through school and therefore plenty of time would be devoted to games.

I will now describe briefly some steps that are being taken towards introducing self-supporting education. In my own school some practical work is taught in all classes so that, from the beginning, the children get some training as regards their eyes and hands as well as their brains. The work is arranged as the circumstances will allow. The boys learn to know what an engine is and how it is worked; they take engines to pieces and put them together again; they learn carpentry and gardening. The younger ones, too young to be interested in tools, do clay modelling and basket-making, which, despite

the tendency to despise it, gives a good training to children. For those who are taking seriously to practical work, there is a tailoring class in which they can be trained to make a living.

We are doing nothing original, nothing that people are not all agreed upon, but one must not despise the infant's first efforts, and Sir Asutosh Mookerjee, visiting the school lately, said that the boys look healthier, brighter and happier than in the schools where they do only book work. That is exactly what is wanted.

The next step I contemplate is a country branch to which boys will go on a system of rotation and where they will take up agricultural operations. When we begin this we may make a step towards self-support. Most of the agricultural products used in our homes can be produced under good modern conditions for a small fraction of the price we pay for them in the bazaar. If the country schools carry on agriculture by modern methods with hired labour to do the bulk of the work, the boys being brought up to be acquainted with the work, and superintending when they reach the senior classes, I hope they may under the direction of practical men and of their teachers soon be worth their maintenance, not by earning money in the ordinary sense but by bringing certain products into their homes that will be of real value there. I can give here no more than a very brief outline of the first step. I must conclude by earnestly appealing to all who are interested in the welfare of their country to study the most hopeful movement of our time—self-supporting education.*

J. W. PETAVEL.

* Literature can be obtained in India from the Calcutta University Poverty Problem Study Fund, and in England from the Educational Colonies Association, Honorary Secretary. J. B. Pennington, Esq., I.C.S., Retd., Victoria Street, Westminster, S.W.

DR. SKINNER'S RETIREMENT.

NO event that has occurred in the educational world of Southern India since the publication of our last number has greater interest for Mysore than the retirement of the Rev. Dr. W. Skinner, C.I.E., from the Madras Christian College. For nearly two generations before the University of Mysore was founded and for years even after the establishment of the Colleges at Bangalore and Mysore, large numbers of such students as sought University Education were being attracted to this institution. The names of the Rev. Dr. Miller and the Rev. Dr. Skinner have still a singular charm for many a parent in this State. For the "old boys" of this College have in no small measure contributed to the making of modern Mysore. From the days of the late Mr. T. R. A. Thumbuchetty, C.I.E., and the late Mr. P. Chentsal Row, C.I.E., who respectively held the high offices, Chief Judge of the Chief Court and Member of the State Executive Council, there has been a continuous stream of Free Church and Christian College men employed in almost every Department of Public Service. They have also distinguished themselves in other walks of life in this State. And, they are not a little proud that at the present moment the highest executive office in the State, that of Dewan, and the highest executive office in the University, that of Vice-Chancellor, are presided over, respectively, by Rajesvadhurina Sirdar M. Kantaraj Urs, C.S.I., and Rajamantrapravina H. V. Nanjundayya, C.I.E., both alumni of the Christian College. A number of other high and important positions are still held by those who have sat at the feet of these two eminent teachers. And now, the news of the retirement of Principal Skinner, would naturally be received with a very heavy heart however reasonable such separation might appear. The learned Doctor and teacher has laboured in the cause of Indian Education for over thirty-five years and that in a trying climate, often under equally trying circumstances. He has given the best of his life to the youth of this country. And, though he has built for himself an enviable reputation as a most successful Principal of one of the largest of Collegiate Institutions in India, yet the noblest part of his work will be, we believe, the high ideals he always set before himself and his pupils, which will influence

not this generation of students alone, but many more yet to come and which he so beautifully summed up in one of his last public utterances in Madras. "In the days to come, the *Alumni* of this College may be found up-holding the ideal of a united India, an India growing impartially for the good of all her children, and an India, in which *privilege means service and service privilege.*" (The italics are ours.) We need hardly say that he will be long remembered and with deep gratitude, in Mysore and we wish him and Mrs. Skinner not only *bon voyage*, but also many years of robust health and happiness in their Scottish home.

V. SUBRAHMANYA IYER.

REVIEWS.

Currency Reform in India, by Prof. V. G. Kale, Aryabhushana Press, Poona. (One Rupee.)

WHEN some years ago the Government of India was feeling complacent over the success of its measures to rate the rupee at 16d., critics felt that the complacency was premature and that the system would not stand the stress of a world war. Thus Mr. Webb of Karachi wrote in 1912 that "a great European war, especially if the British Empire were involved, would create a panic in financial circles. At such a time the last thing we should wish to see would be a sudden collapse of the rupee." Soon after the war broke out, the Government began to sell sterling drafts on London, and the parity of the rupee was not seriously disturbed then or for some time after. The Government was pleased, and it was felt by the supporters of Gold-Exchange Standard that they had been vindicated by the march of events.

Soon the Currency situation in the world developed unexpectedly. All the belligerent countries had to coin more small change, and this along with the reduction in output set the price of silver rising till at last it became profitable to melt the rupee on account of its excess value as bullion. This naturally affected the ability of the Government of India to supply more rupees and the rate of exchange was progressively raised with every rise in the value of silver till it has reached 24d.

The situation is a serious one, and although international trade will adjust itself to the new rates of exchange, at present some are hard hit, such as the Indian exporters, the Government of Mysore, and the Indian labourers in the Far East who have to make remittances home. A number of suggestions have been made, such as debasement of the rupee to make it once more worth 16d., opening of the mint to silver, legalisation of British Treasury notes in India, and bi-metallism. Professor Kale, in his series of articles now gathered into book form, advocates the opening of the mint to gold and freedom of gold imports. As a matter of fact, the first has been in operation for some time, and the second has been partially conceded. While the situation is

decidedly abnormal and of a fleeting character, there can be no doubt that Professor Kale's proposals, advocated with vigour, are the only ones that will meet the immediate needs of the situation and at the same time lend themselves to easy transition back to Gold-Exchange Standard or to paper currency based on gold.

N. S. S. R.

The Doctrines of the Great Educators by Robert R. Rusk.
Macmillan, 5/ net.

THE author from the platform of his preface views his readers as students of education and a nondescript class of 'Others.' To one of these 'Others' this short and clear account of the doctrines of the great educators is full of interest not unallied with wonder. One marvels at the slowness of progress, at the dulness of corporate intellect, at the woodenness of the god in the machine of executive government, at the small grasp there is of the essentials of good and life, and at the persistence with which the human race forever argues "about it and about."

Centuries before Christ, Plato accepted as truths, and laid down as principles, facts and conditions about the existence or validity of which we still hold our windy debates. He claimed that "education is the first and fairest thing that the best of men can never have," and that it cannot be begun too early. He knew, as we are slowly learning, that the *beginning* was the most important step in all the years of training and had far-reaching effects for individual and for state. He impressed on his generation that the child must be led to love knowledge for its own sake, and so his first introduction to it must be along the paths of his own exuberant activities;—the subject of child's play was found to be of sufficient merit to occupy the consideration of a philosopher. Interest was to be guided along the right lines partly by beautiful surroundings; the child was to be hedged in by the fair things of the moral and material world, so that in after years his inclination might lead him always to the fine and noble and good.

Pestalozzi and Froebel in the early nineteenth century advocated, and Montessori in our own day is still advocating these principles of early education to, at best, rather inattentive ears.

Plato had no instinctive leanings towards the commonalty, but his regard for the state led him finally to the principle of universal education—and to the recognition of compulsion as the only means of assuring it—but his knowledge of the human mind saved him from the extravagant notion, which some moderns would seem to hold, that *all*

men must be taken on to the higher planes of learning. The conditions that fitted a man for an advanced education lay in his own character : he must have "courage, magnificence, apprehension, memory," and be the friend of truth, justice and temperance. Obviously no man was to be barred by class or by want of material property. Pestalozzi, the lover of the poor, had his schemes ever got beyond fundamentals, could have offered nothing fairer. Comenius, whose hopeful idealism proposed to teach all things to all men, and whose simple plan was to give a thorough education, by easy and pleasant paths, before the age of maturity—"as soon as we succeed in finding the proper method"—somewhat modified the magnificence of his proposals when he suggested that only "select intellects" should attempt a university course, and advised the rest to "turn their attention to more suitable occupations, such as agriculture, mechanics or trade."

Plato was in advance of the ages that have succeeded him in allowing that a woman's general ability was equal to a man's. Though he admitted that she was physically weaker, she was to go through the same training as a man in "Music" and "Gymnastic," and in *the art of war*; the latter that, if necessary, she might defy the enemy on the home front. Quintilian insisted that both parents of the educated man must be cultured, and Roman girls were apparently taught the same subjects as boys. Even Rousseau allowed that, "but for her sex, a woman is a man"; the difference he made in her education was based on the difference of her life's aims, which as he states them convict him of an *a priori* judgment, and as voiced to-day are something of an impertinence. Comenius may be relied on for the more unqualified view: "They (girls) are endowed with equal sharpness of mind and capacity for knowledge, and they are able to attain the highest positions, since they have often been called by God to rule over nations." The latter part of that statement is perhaps deserving of more consideration in the councils of men.

It was impossible for the great educators, whose aim was the full development of man, to neglect his physical training. Plato's course of early instruction is divided between Music and Gymnastic. Quintilian would send his pupil to a school of physical culture. Elyot prescribes wrestling, running, swimming, handling the sword and battle-axe, riding and vaulting, for the sake of their training; hunting, whatever the quarry, he recommends; tennis is to be played in moderation, while football is wholly condemned, "wherein is nothing but beastly fury and extreme violence"! Milton, in addition to sports, advises jaunts abroad for the study of nature and the works of man.

Rousseau's statement, "A feeble body makes a feeble mind," has too often been disproved to be accepted without qualification, but no-one gainsays the desirability of Locke's "sound mind in a sound body," nor the close relationship between health and holiness.

The early educators, whose interests lay in the training of rulers, had no place in their curriculum for manual work. In Plato's Republic "All the useful arts were reckoned mean;" but Locke, who is likewise concerned with what befits 'a gentleman,' would have him learn a trade, if possible several. His motive is the skill and healthy exercise to be so acquired. But those educators who have been inspired for the popular good, or whose ideas of education have been unbiassed by the thought of a specially conditioned pupil, all declare for some degree of manual training. The wonderful powers of the hand are to be developed, not neglected, and it is a poor sort of pride that bolsters itself on an incapacity.

Mr. Rusk's chapter on the Jesuits gives an account of a most wonderful anticipation of modern schemes and methods, arrived at even in the early days of this great teaching body. Incidentally he refutes the charges frequently brought against them of unadaptability, narrowness of educational view, and disregard for the needs, both mental and physical, of their pupils and of the times. The sureness and effectiveness of their schemes of education, the unhesitancy with which they adopt the method most suitable for the occasion, the elasticity of their curriculum, their insistence on the proper equipment of the teacher, explain in some degree the success that has attended their work.

The book is indeed full of interest, and its particular value to a student will be its juxtaposition of the great thinkers on education, and the ease with which their relationship may be judged; to the 'Others' it will perhaps bring the revelation of their remarkable unanimity on the principles of education, and their modernity in points of detail. Plato insisting on the value of prize giving, and co-operation in studies, and the advisability of the masters taking part in the athletics of the boys; and Quintilian asserting the importance of the nurse's accent, the advantages of small classes, simplified spelling, co-ordination of studies, the conversational method in language teaching and, above all, the importance of the efficiency of the teacher, are very near to the thought and heart of our own day,—it is possible their achievements were even nearer to its desires.

However, they had their difficulties, and one of them is still with us,—the teacher who knows nothing of teaching. Elyot touches on

one cause of this fairly complete inefficiency, a cause which in this twentieth century is not inactive. "In engaging servants exceeding care is taken to enquire into their abilities, but in engaging a school-master the only concern is for how little he can be secured"; and he exclaims with feeling: "Lord God, how many good wits of children be nowadays perished by ignorant schoolmaster!"; to which this present age might still say "Amen."

X.

The Century of Hope. By F. S. Marvin, Clarendon Press, 6/- net.

"THIS little book," says the Preface, "attempts to look at Western history in the last hundred years from the same point of view from which *The Living Past* treated western progress as a whole." As for the plan,—“there is an attempt throughout to combine a roughly chronological treatment with the form of short essays on successive great topics as they become prominent in the hundred years from 1815 to 1914.”—The growth of knowledge; that indefinable thing which is called “freedom,” but which may be given the wider name of “growth of soul;” the new hope that worships the future; that keen and critical vision of the past through which alone the future may be revealed—these are, to Mr. Marvin, the essential characteristics of the nineteenth century, “the century of hope,” and with these in view he deals with the life of the century as an evolutionary process, taking its varied aspects in turn. A more complicated task it would be hard to find, and rigorous compression has made it the more difficult. But it is admirably done. The book has as its groundwork a remarkably detailed and accurate knowledge of fact. Mr. Marvin is equally at home in the political, the social, and the scientific sphere; and, keeping in view, as on every page he has done, the intimate relation of one movement with another, he has produced a book that might justly be termed indispensable. It may be doubted whether anywhere else the reader can obtain a view so clear and so adequate of those generating processes that have produced our own time.

To choose, a chapter for special reference,—that on “Biology and Evolution” is of particular interest because in this sphere that principle comes into the clearest light which may be said to dominate the century—the principle “that every organism—and in this broad sense we may treat every human society and mankind at large as an organism—is an historical being, to be explained by its history.” In

twenty-six pages a wonderfully clear and comprehensive account is given of the century's development of biological research and discovery ; of the work, and the conclusions of the greatest explorers in this field ; and of the bearing of the whole matter upon thought and life. The relationship between the work of Lamarck, Bichat, Schwann, Von Baer, Darwin and Lyell is made remarkably clear considering the space available ; and a definite and accurate impression is conveyed both as to the import of evolutionary theory and as to the stage at which it stands. Of course criticism of such epitomisation is inevitable. No doubt every reader, in accordance with his individual training and temper, will have his own criticisms to make as regards stress and proportion. The present reviewer finds only one change to wish for in this chapter. Mr. Marvin does not fail to show that into *man's* development there enters the unique factor of deliberate self-modification towards a consciously chosen ideal. "The effort involved in all life becomes with man not only conscious but ideal, an effort to reach a higher state which he deliberately thinks out and places before himself." He touches also upon the question of purpose in creation and development and finally remarks,—“the opinion seems to gain ground that something like purposeful effort lies behind the variations of life. But we should like to have (in modification of the suggestion that developing things are “to be explained by their history”) some reference to the Aristotelian suggestion that, in the case of a process of continuous upward development, the truest element of explanation is to be found not in origin or history but in the last stage that has been reached—that what is last in time is logically first. This is the true criterion of values. Much of the sorrow and despair of religiously-minded people who found themselves unable to resist the evolutionary conclusion as applied to man arose from failure to perceive this. The “value” of music, for example, is totally unrelated to the age-long history of the apprehension of sound, of its recollection, of its primitive emotional appeal. And so with every function of the human spirit. Whether or no the human soul is differentiated in kind, those elements in human life which are the crown of the evolutionary process and which gain valuable comment from its study, are yet utterly *new* in their value and significance. In one sense the process interprets them : in a much profounder sense they interpret the process.

The chapter on “the New Spirit in Literature” is perhaps the least satisfactory, for it is in art (closely related though it be to the general process) that individuality most disturbs the application of general principles. The principles applied in this book are so far from

accounting for the value of the literary product of the century, and Mr. Marvin, by necessities of space, is compelled to keep so close to his principles, that one is conscious of a certain straining and artificiality. The chapter is a very useful indication of tendencies, and will be not misleading but helpful if it is properly supplemented by its reader. One is thinking particularly of the students of this University, for whose study this book has been "prescribed." We shall have to see to it that this chapter is not misunderstood !

J. C. R.

* * * *

History of the War, Vol. XXIII, by John Buchan. Nelson. 2/6.

THIS volume deals with a very eventful period of the Great War. In the early months of 1918, the end yet seemed far off, but there was an expectation that somehow it was approaching. As the writer says "the skies were dim and tenebrous, but behind the clouds men felt that there was light." As the months went on and the German armies spent themselves in vain, Bulgaria grew anxious and a bold offensive on the part of the allies brought her to her knees, and she sued for peace towards the end of September. Allenby's victories in the same month and capture of Damascus, (October 1) coupled with the defection of Bulgaria led to a change of ministry in Turkey, and "the policy of *Sauve qui peut* began to have supreme attractions for Turkey's governors." Negotiations were begun with Admiral Calthorpe, which resulted in the signing of the armistice on October 30. "The surrender of Turkey brought to an end the hopes of the Central Powers of using gains in the east to redress the balance in the west." In the west, long before Turkey signed the armistice, the German position had seriously changed. In the last chapter of the present volume the author describes the advance of the Allies to the capture of Cambrai on October 9, after the defeat of the enemy "fairly and squarely in a field action." "The German units were depleted, weary, and disheartened, and their organisation was cracking."

The narrative is clear, though somewhat dull, and the large number of maps are a great help.

N. S. S. R.

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God in a World at War, by Douglas Clyde Macintosh, Ph.D., Dwight Professor of Theology in Yale University. George Allen and Unwin. 1/6.

THIS little book merits more attention than its bulk suggests. Written, apparently just before the ending of the war, by one who had

acted as chaplain on the field and in hospital, it faces certain fundamental religious problems rendered more insistent by the war itself. Its four chapters are entitled, "God," "God and History," "God and Evil," and "God and the Individual." These brief chapters are nothing less than masterly; and they are as lucid in style as in thought. Further, they are not, as a rule, written from a distinctively Christian point of view; there are few passages that will not appeal both to the instinct and to the thought of the devotee of any living religion.

The second chapter deals with "God and History." Certain "erroneous notions" are discussed. There is the "reversion to religious tribalism" on the part of the German Emperor and many of his people. "The year 1917," said the former, "with its great battles has proved that the German people has in the Lord of Creation above an unconditional and avowed ally on whom it can absolutely rely." And even in 1918—"Our enemies cannot and will not succeed. We are under divine protection." No wonder Dr. Macintosh refers to this attitude as one of "almost incredible simple-mindedness." And he quotes an interesting comment on such an attitude, of one of the Kaiser's own subjects, Dr. Muehlton, so early as 1914,—“Not a telegram in which the Kaiser doesn't say, 'God has helped,' 'may He continue to help,' 'He will still help,' 'the God of Christianity, the German God, the God of battles who does not forsake the righteous cause.' What will he say if the war should be lost? . . . Will he and his myrmidons admit that they have been deceived in God, and have praised Him prematurely? Will they acknowledge the injustice, of our course, if God's verdict goes against us? Will they then see that there is no partisan God?" Similar to this curious and interesting German attitude was that of many people on the allied side. A German-American was heard to say,—“If Germany doesn't win this war, there is no God.” But a British-American used precisely corresponding words,—“If Germany wins this war, there is no God.” What is wrong, in either case, with this attitude? As regards the German attitude, of course, it suffices to say, in view of "what the world knows as to the causation and the conduct of this war on the part of Germany," that, in Ex-President Taft's words, "Germany has mistaken the devil for God,—that right is God's will, and Germany cause was contrary to right. But, believing in the absolute rightness of the allied cause, and therefore in its accordance with God's will,—was the right ending of the war providentially inevitable? No, says Dr. Macintosh. "The side with the greater moral justification has not always won its wars . . . Right has to be worked

for, and sometimes it has to be fought for The fighting is no sham battle. Its issue is not predetermined." Neither by absolute predetermination nor by arbitrary intervention does God sway the course of human things. Through human achievement by right action and through human learning by suffering God's ends are attained. The allies *might* have lost the war, and that they won it is due to their own moral strength in endurance and in the using of material resources when these became available.

Space permits only this brief and inadequate reference. We commend this chapter, and indeed the whole volume, to those who are endeavouring to think out the religious issues raised by the war.

Z.

Essays of Hazlitt, selected and edited by Arthur Beatty.
Heath & Co., 3/ net.

THIS is much more than a class-book, though admirably adapted for class use. Its introduction and notes are at once brief and adequate. Hazlitt's easy, vigorous and straightforward style peculiarly adapts his work to the needs of those who are studying the language. He declared, "As to my style, I thought little about it. I only used the word which seemed to me to signify the idea I wanted to convey, and I did not rest till I had got it." Perfect fitness of phrase, and total lack of affectation, give to this style a special value as model and influence. Nor is normality its highest virtue. As Hazlitt himself adds—"In seeking for truth I sometimes found beauty." He is never imitative, never dull, never unintelligent even in judgments that have not stood the test of later days. He is one of the few great critics. Such is the insight, and such the art, of his critical essays, as to give them practically a creative value. And he lived at a time when there was work of first-rate originality to criticise, and knew all the poets and representative men of his time. His reflective essays unite an un-failing literary charm with the kind of common sense that yet seems revelation, and with that vigorous non-conformist habit that was his religious inheritance and dominated all his work. And he is unexpectedly versatile of mood. The open road is dearer to him than the study. From neither critic nor philosopher, as a rule, do we expect things like this,—“Give me the clear blue sky over my head, and the green turf beneath my feet, a winding road before me, and a three hours' march to dinner—and then to thinking! It is hard if I cannot

start some game on these lone heaths. I laugh, I run, I leap, I sing for joy." No wonder that Stevenson proclaimed of this essay "On going a journey" that "there should be a tax levied on all who have not read it." Hazlitt is a good companion, and his essays are among our best books of refreshment. This edition contains twenty-two of the best of them, arranged under four headings—autobiography and reminiscence, philosophy and reflection, the art of prose, and criticism. The essays abound in reference and allusion, and the brief notes here given provide just such information as is required.

J. C. R.

A Colloquial Sinhalese Reader. By H. S. Perera and Daniel Jones. Manchester University Press.

THIS is very different from the common run of reading books, which are produced in such large numbers nowadays; for it aims at teaching not literary Sinhalese but the Colloquial speech, the form chosen being the one used by the educated inhabitants of Colombo. Another special feature of the book is that it tries to record the exact pronunciation of Sinhalese sounds; and, with this object, gives all the reading lessons in phonetic transcription. The plan of the work is thus eminently practical. The book also contains a well written introduction on the general phonetics of the Sinhalese language which is sure to be of interest to phoneticians. The name of Mr. Jones—one of the joint authors—who some years ago delivered lectures in Madras, under the auspices of the University, on the pronunciation of English, is a sufficient guarantee for the scientific value of the information contained in the book.

M. H.

Elementary Mensuration, Constructive Plane Geometry and Numerical Trigonometry. By P. Goyen. Macmillan.

THOUGH the length of the title of this little book of about 150 pages suggests an 18th century fabric, the author who is an Inspector of Schools has succeeded in producing a book which aids the disciplining 'of hand, eye and brain' by actual 'practical work' more than the ciphering out of numerical results by means of formulæ. To the general student who learns Mathematics after a certain standard, a course of practical mensuration and numerical trigonometry is more needed than bulky well-bound volumes of theoretical Geometry.

With this end in view, the author has described what he considers to be the foundation work that will enable the learner to give vivid life and significance to such portions of necessary mathematics, which in some authors' hands unfortunately develop into 'mere words.' The book, which is otherwise so excellent, contains we believe so many pieces of bookwork and worked examples, that the student may easily get tired of the drilling before he begins to appreciate the subject matter.

The Analytical Geometry of the Straight Line and the Circle. -By J. Milne, Bell and Sons.

THIS book, included among Bell's Mathematical series issued under the general editorship of Dr. W. P. Milne, is intended to be an introduction to the formal study of the analytical geometry of the straight line and the circle, based upon a close reference to familiar geometrical illustrations. From this point of view there can be no hesitation in saying that it provides an excellent elementary treatise on easy graphs. The rest of the book deals with the subject proper, *viz.*, the linear equation; concurrence, collinearity and perpendicularity of lines; circles, chords, tangents, poles and polars, conjugate points; arthogonal and coaxal circles, in a systematic manner combining analytical result with simple geometrical investigations. The book work, worked examples and exercises, which have been selected with a view to the needs of the private student, are really well-chosen and arranged to give the student a clear enough grasp of the subject he is studying. But all the while the underlying principle of analytical geometry is distracted. While we should agree with the author that analytical geometry relates more to the geometrical loci than to algebraic results, we must not forget that the title 'analytical' is prefixed to 'geometry' and that the co-ordination of the two must always be in favour of transcending at every stage the purely geometrical. Anyhow to the average student, the treatise comes in handy as a good drill-book in elementary analytical geometry

War in the Underseas, by Harold, F. B. Wheeler. Harrap, 6/-net.

MR. Wheeler is a very well known writer upon matters naval and military, and their heroes, and this is his third book bearing upon sea-phases of the great war. Admirably conceived and written, it records,

with striking detail, a large number of typical submarine exploits and adventures many of them already famous. The deathless achievements of Commander Norton and his E. 9 are narrated here, and those of Lieutenant Holbrook in the Dardanells. There is a vivid narrative of the Zeebrugge affair. The doings of enemy submarines are not neglected, and there is much that is new to most readers in the chapters entitled "Submarine V. Submarine," and "U-Boats that never Returned." The book is attractive enough as a collection of narratives of the most romantic adventure, while it serves as a remembrance of endurance, courage, and inexhaustible resource in one of the most important spheres of war-fare. But there is more in the book than this. The writer speaks with intimate knowledge both of the details of submarine work and of the history of submarine-development. We are all familiar enough with the term "depth charge," for instance, but his chapter "Depth Charges in Action" gives us real knowledge of their working, and the author contrives to take us to both points of view—that of the above—water crew using the charge as weapon, and that of the submarines' people waiting breathlessly beneath, shaken by the tremendous explosion, and wondering whether bolts and plates have held. The construction and development of the German submarine is dealt with, and perhaps of even greater interest is the first chapter, where the submarine craft is traced to its earliest beginnings, when a Dutchman called Drebbel is said to have rowed, in his submerged boat, from Westminster to Greenwich. The development of the submarine and the torpedo makes a most fascinating chapter of naval history; and we are tempted to quote, for example, a description of the *Nautilus*, the "submarine [of the American, Fulton, which was launched in 1800, which once succeeded in remaining under water, with her crew, for six hours, and which Fulton hoped would be able to annihilate the British Navy! Space forbids, and we can only commend heartily to the reader a remarkably well-informed and vivid book.

Z.

Practical Hints on the Teaching of Latin, by L. W. P. Lewis, M.A.,
Senior Classical Master, Bradford Grammar School. MacMillan,
5/-net.

IN this university, where not a single person is engaged in the teaching of Latin, practical hints on that work might seem of little interest; but there is a great deal in this book that is of importance to us, and it is therefore dealt with at some length. These four lectures

were delivered in August 1918 and 1919 at the Board of Education's Latin Courses at Ilkley, in Yorkshire, and they are published with the consent of that Board, though without its accepting responsibility for their opinions. These opinions are the outcome of twenty years' most careful experiment, and to us they appear to be essentially sound.

Mr. Lewis acknowledges a conservative view. He disbelieves in the modern tendency to make things easy at any cost. Latin is a difficult language, and to evade its difficulties is both to fail in its study and to lose the educative value of it. Moreover boys who are properly guided love the challenge of difficulty. He disbelieves in the modern tendency to eliminate the abstract in favour of the concrete in all branches of education, for children must be taught to *think*. He speaks with particular disfavour of the attempt, specially associated with the Perse School in Cambridge, to teach Latin by the direct Method. He believes it to be comparatively unsatisfactory even as regards the acquiring of knowledge of the language, but his main point is that by this system much of the educative value of the study is lost. "I believe Latin to stand, side by side with geometry, supreme as an instrument for teaching boys how to think, and this is its great educational value." As Mr. W. Edwards says in his introduction, "Every language, it is true, has a disciplinary value, but Latin in this respect stands pre-eminent among languages. A boy cannot translate a Latin sentence without being compelled to think at every step." There is no language the methodical study of which so helps the learner to master the fundamental principles of speech. Much of this advantage appears to be lost by any method that does not compel deliberate study of a grammatical form, before that form is used, and constant translation between Latin and English.

It might be replied by the devotees of the Perse system that the main point in the study of a language is training to think *in that language*, and that this is best secured when the pupil's native language intervenes as little as possible; and further that the conversational method conduces much more to mental alertness than what Mr. Lewis calls "the literary method." But we incline to think that the literary method does bring into clearer relief the peculiar definiteness and logicity of Latin, and thus provides a superior discipline; while Mr. Lewis has been entirely successful in showing that no loss of interest, no "dulness," need be felt if the teacher is the man for his work.—The point that mainly concerns us is Mr. Lewis' insistence upon the constant and systematic study of grammar, and his unashamed advocacy of memorisation. "Set up a sort of chant. Let the class

sing its Latin grammar if it likes." Much is heard, in Mysore, of the desirability of the direct method in the teaching of English. We doubt whether it will ever be possible, in our schools, to work it satisfactorily. It makes enormous demands upon the teacher. There would have to be an infinite improvement in the teachers' knowledge of the language, and in their training as teachers, and correspondingly in their remuneration and their status. Meanwhile the teaching of English is being ruined by approximations to the direct method, and in particular by the neglect of grammar. The regular, persistent *grinding* of grammar must come in again, if school boys are even to recover the standard of a past generation. It need not be irksome, however, Mr. Lewis gives us many a hint on the maintaining of interest and enthusiasm in class. His great "lever" is "the boys' interest in their own progress." It is "the great 'child-fact' upon which we can always rely."

Another point of interest is Mr. Lewis' belief that the value of the training of teachers, though that training is "helpful at the start" may be "pushed too far." He thinks that too much stress is laid, at present, on the theoretical part of a teacher's training, and is particularly suspicious of the word "child-psychology." "Probably more harm than good is done by too close a study of the psychology of the child." The teacher's individuality, the individuality of his pupils, even such a thing as the individuality of a class, are what ultimately matters most. We entirely agree, there is the gravest risk, where a teacher's training has been concerned too much with such matters as psychology, the principles of education, and its history, his principles and his theory may even tend towards detaching him from his class, and towards a fatal uniformity. The prime essential of the training of teachers is *practical work* under practical guidance. If a man is fit to become a teacher at all he needs but little theory, and what he gets he will incessantly modify for himself when he has begun his work.

J. C. R.

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A Geography of America, by T. Alford Smith. *MacMillan's Practical Modern Geographies*.

THIS is a brief and attractive Geography, upon the modern system which makes this a living study and not the old cramming of place-names and statistics. There is an interesting introductory chapter upon the discovery of the American coast-line, and historical considerations

are kept in view throughout. All departments of geographical study, from the physical to those of industry and trade, are briefly, clearly and adequately dealt with, and much attention is paid to communications. An appendix deals with the attitude of the sun, the variation of day and night, and the apparent path of the sun. The book is divided into lessons, and contains innumerable exercises; and there is constant direction in the use of the atlas. The book itself contains a large number of maps, and many very attractive illustrations.

Some English Usages for Indian Students, by H. G. Wyatt, Principal, Central Training College, Lahore. MacMillan.

FROM fourth form to graduation, English idiom is the Indian student's trouble; and it is apt to remain a trouble throughout life. So varied is English usage, and so hopeless is the attempt to reduce it to rule. Systematic instruction goes a certain way; but usually this is not given in schools, and in colleges it is too late to begin it, apart from the fact that there is no time. But even the most systematic training in grammar and idiom can but appeal to the less rational side of memory; nor could memory bear the load of even such codifications as are possible. The Englishman does profit throughout his life by the grammar-lessons he resented at school; but his accuracy in his use of his language is primarily due to the fact that from the first he has lived with people who spoke it accurately, every language-precept is fixed in his mind by custom, and language to him has always had a living context. Thus for the Indian student the main helps towards accuracy are reading, and conversation with people who really know English, in addition to tutorial instruction arising out of errors that he himself has made. It is of no use to set him down to an English grammar, and ask him to learn it. There is one sort of language-book, however, to which he may with the greatest profit apply himself,—the book that gives, not rules, but specimens of usage, normal sentences, such as belong to the talk or writing of every day, and chosen with particular reference to the sort of error which (particularly through the influence of vernacular usage) he is apt to commit. Wyatt's book is of this kind. It catalogues, in alphabetical order, a number of much-abused English phrases, and illustrates, in very simple sentences, their proper use. It excludes both slang and uncommon usage, and it provides, in the form of exercises, the necessary practice in the use of the various idioms that are illustrated. It contains a useful appendix, upon "common Indian errors."—The book is

a small one, but so comprehensive that students, and indeed graduates, will find it an admirable handbook.

Z.

The Ahmadiya Movement, by N. A. Walter, M.A., Calcutta. The Association Press, London, etc., Oxford University Press. Rs. 1/4.

THIS is the second volume in the "Religious Life of India" series, of which "The Village Gods of South India," by the Bishop of Madras, was the first. The purpose of this series, of which many more volumes are in preparation, is to deal with "the leading forms which religious life has taken in India," and produce "really reliable information for the use of all who are seeking the welfare of India. Editor and writers alike desire to work in the spirit of the best modern science, seeking only for the truth," and "their study of the relevant literature has in every instance been largely supplemented by persistent questioning of those likely to be able to give information." The writers are Christian, and the enterprise is of course carried out from the Christian point of view; but an entirely dispassionate treatment has been attempted, and no doubt the Indian reader will find much that is of value in the attempt to give a clear and definite account of the principles, and the history, of the various movements dealt with.

Mirza Ghulam Ahmad, the founder of the Ahmadiya community, lived from about 1836 to 1908. He professed to be at once the promised Messiah, the Mahdi, and the incarnation of Sri Krishna. His justification of these claims is dealt with at large in this book, as also are the nature of the community founded by him, the significance of the movement, and its relation to orthodox Islam, to Hinduism and to Christianity. The number of Ahmad's adherents is very variously estimated. He himself computed them, in 1908, at 500,000, while Mr. Walters on the other hand, declares "it is safe to say that at the very most there are not more than 70,000 followers of Mirza Ghulam Ahmad at the present time."—The book is a very careful and scholarly production, and attractively written. The author has spared no pains either in the investigation of Ahmadiya records or in seeking verbal information. As far as possible he has used the language of Ahmad himself and his disciples; and however the reader may regard his point of view he is bound to find it of great interest and value as a record.

COLLEGE NOTES.

MAHARAJA'S COLLEGE.

WE are not ashamed to confess that the scene of our exploits this time alternates between the play-ground and the refreshment room. Towards the close of September a large variety of inter-class athletic contests was started. One of the items of interest was hill-climbing. Mr. E. V. Pattabhirama Iyer, the winner, did the Chamundi Hill (1,200 ft.) in $10\frac{1}{2}$ minutes. The Championship medal in connection with these contests goes to Mr. B. T. Kempanna who topped the list in five out of nine items. We offer our hearty congratulations to all the winners.

The 1st and 2nd of October were our own in a real sense for they were devoted to the celebration of the College Day. On the morning of the 1st there was a cricket match between the old boys and the new. The result is not easy to ascertain for the old boys, after their innings was over, began to tackle, not the present men of the College, but the refreshments provided for the occasion. The public meeting on the evening of the 2nd was, as usual, a grand function. It was invested with special importance this year, for the first item on the programme was the presentation of a congratulatory address to an old boy of the College who has been chosen for the distinguished post of the Dewan of Mysore. Sirdar M. Kantha Raj Urs, after receiving the fine casket in which the address was enclosed, acknowledged the honour in language that was as graceful as it was sincere. Then followed a series of 'toasts' (a word considerably clipped here of its usual association) by a number of speakers occupying high positions, official and academic. The old boys who have to take part on these occasions have a rather difficult part to play; for they have to strike a respectable mean between the admission, on the one hand, of the rapid progress their *alma mater* is making in all directions, and the necessity or duty, on the other hand, of proving that they were not somehow the worse off for the absence of most of the advantages enjoyed by the College at present.

About 56 of our men took their B. A. degree in the recent Convocation of the University. Of these, Messrs. M. I. Sheriff,

M. Narayana Rao, and K. R. Srinivasa Iyengar, took a first class in their optional subject. Mr. Sheriff, Mr. Venkataramiah, medalist in economics, and Mr. S. V. Ranganna, who takes a double first and comes from the Central College, have all joined the tutorial staff of the College. We have great pleasure in welcoming them to our midst and trust that they will have a more pleasant time of it than their predecessors of the first tutorial batch who joined the College eagerly expecting the work and status associated with the name of 'tutors' in the older Universities of England but soon found themselves set to the lively task of affording relief to professorial shoulders groaning under the weight of piles of students' exercises.

The Principal was at home to all the new graduates on the 13th. We are very glad to learn that all of them have agreed to become permanent subscribers to the *College Magazine* (and may we add, 'to the *University Magazine*' also?).

The College notice-board gives abundant evidence of the brisk activities of our various associations. One is not so sure that the Commerce Union figures in the group as frequently as it used to do. We commend to the editors of the *College Magazine* the idea of publishing the best papers read before the societies of the College. A more detailed reference to this, the intellectual side of our work will appear in the next number.

C. R. N.

THE MAHARANI'S COLLEGE.

It was expected that the College classes would be removed to a new building, where there would be more scope and room for their activities. But, for the present, we continue to live within the High School, partly dependent on their reading room and on their play-grounds. Thanks to the Professors and teachers both of our own and of the Maharaja's College, we have been able to collect about Rs. 150 towards the maintenance of the Reading Room and the Games Club. The rains, the long holidays and the carriage wheels have united in disfiguring the already worn-out court. A renovation was postponed in view of the unnecessary expense during our short stay in this building. The Principal has now undertaken the supervision of the work, and already the court is looking the better for it.

At the last meeting of the Debating Society, Mrs. Hensman proposed to form a Club for students, which would bring them into touch

with a few outsiders. It is hoped that it will be started early next month and we shall have our first Social before the Christmas vacation. Sri Abhayambal proposed to have a Historical Society which she has undertaken to supervise and conduct. The first issue of the *College Magazine* will appear next month. It will be of great use in stimulating the students to a higher sense of their responsibilities.

We had our moderate share in the enjoyment of the varied activities of the Dasara season. The Dasara festivities, the Exhibition, the Mysore Ladies' Conference, the many public lectures and lastly the University Convocation—one and all claimed our equal attention and kept us in a whirl of expectation and excitement. Her Highness the Maharani, C.I., was so kind as to invite the College students to the Chamundi Thotti for sight-seeing in front of the Palace. It is the first time that such an invitation has been extended and it was greatly appreciated.

We enjoyed the convocation most though it was a pity there was not a single lady graduate to take the degree this year. We earnestly hope this deficiency will be made good next year by the first batch of students from our College who will appear for the degree Examination of 1920.

It is highly gratifying to us that our ladies are taking keen interest in the educational problems of the day, as is evidenced by one of the resolutions passed by the Ladies' Conference, against the introduction of the vernacular-medium into the system of Women's higher education in our State. We also take pleasure and pride in the fact that the Ladies' Conference was rounded off with an entertainment got up by the Mysore Ladies' Association in honour of the elevation of the two Superintendents of our College and High School to the posts which they now occupy.

The students were taken to the University Library by Mrs. Hensman and Sri K. D. Rukminiamma. As many students as the carriages could seat were taken by them. It was quite a gay batch which reached the University Library at 4 P.M.; after a thorough inspection and having arranged for a comfortable nook were the girls could work undisturbed if they wished, we returned at about 5-30 P.M.

CENTRAL COLLEGE, BANGALORE.—*The Physical Sciences Club.*

THE Physical Sciences Club began its work for the year with an Inaugural Address by Mr. S. Raghavendra Rao, B.A., B.Sc., R.C.E., M.I., Professor of Mechanical Engineering, on "The Outlook of Engineers

and Technical Men in India." The lecture, though short, was instructive and interesting. An ordinary meeting was held on the 15th September, when Mr. K. B. Madhava, B.A., (Hons.) of the Mathematical department of the College delivered a lecture under the title "Sesame within and around us." It was about a new theory proposed by Mr S. V. Ramamurti of the Indian Civil Service, to explain all physical phenomena on the basis of a single universal doctrine. Another meeting was held on the 21st October at which Mr. Banerji, M.Sc. of the Indian Institute of Science read a paper on "The Constitution of Matter." All the meetings were well attended.

THE KARNATAKA SANGHA.

The Inaugural Address of the Sangha was delivered on the 22nd July 1919 by Brahmasri Pandit K. Subrahmanya Sastrigal of the Shimoga Collegiate High School, the subject of the address being "Dramatic Literature, with special reference to Kalidasa. The meeting was presided over by Rajasabhabhushana Karpur Srinivasa Rao, B.Sc., L.C.E. The next meeting was held on 12th August when Mr. P. Krishna Rao of the second B.Sc. class read a paper on "Chitaldrug and its Naiks." The lecture was illustrated with lantern slides, kindly lent for the occasion by the Inspector-General of Education. Mr. M. S. Puttanna, B.A., presided. The presence of a large number of students at the Kannada lectures and the care with which the student lecturers prepare and deliver their lectures show that our students have not lost regard for their vernacular.

The Magazine issued by the Sangha under the name "Prabuddha Karnataka" has been very well received everywhere by the Kannadigas, and the third number of the same has just been issued.

B. VENKATANARASAPPA.

Geological Excursions during the Dasara Holidays.—Two excursions were arranged—one for the third year B.A. and B.Sc. students of the geological section, with the professor Mr. V. S. Sambasiva Iyer, B.Sc., L.C.E., at their head, and the other for the second year students of the same section headed by Mr. L. Rama Rao, B.A., demonstrator.

The first batch consisting of 15 students had a very instructive trip to some fossiliferous areas in the Madras Presidency. Among the numerous interesting items of the programme a few points are worth

special notice :—

(1) The fossil wood area on the low hills near Tiruvekere, 16 miles east of Villapuram junction, resembles a wood-yard with logs of timber. Several old trees up to 60 feet in length and about three feet in diameter are now lying on the hill slopes, but their substance is no longer wood; it is entirely replaced by stony matter, with the structures of the wood preserved in their entirety.

(2) The area near Vallam (Tanjore), where perfectly—transparent water worn pebbles of pure quartz occur in conglomerates of the Cuddalore sand stone series. Lenses for spectacles are being ground out of these pebbles by an Indian mechanic at Tanjore, for sale.

(3) Horizontal and alternating beds of bright yellow ochre and red ochre, also near Vallam. This yellow ochre is being used extensively for colour washing of buildings in Bangalore, Madras, etc. Such ochres have not as yet been discovered in Mysore.

(4) Near Rajahmundry a very instructive association of rocks was studied—*viz.*, alternations of igneous flows and marine fossiliferous formations. This series is capped by shallow water deposits—Cuddalore sandstones. One of the inferences is that this area which is now dry land and far removed from the Bay of Bengal was once submerged under the sea.

The second batch of students was taken to some places of geological interest in the Chitaldrug, Shimoga and Tumkur Districts. They inspected the old workings of copper sulphate near the village of Ingladahal, about 3 miles to the south of Chitaldrug, the manganese mines at Sankaragudda, about 16 miles from Shimoga, and some hills of geological interest near Chicknayakanhalli.

Serious attempts at self-discipline became essential in travels with cut and dried programmes like the geological excursions and the students of the geological section have this special advantage in their favour, besides visiting incidentally places of interest from other points of view.

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SPORTS.

THE Physical Culture Committee of the University, Bangalore Section came into being at the beginning of this year with Mr. E. P. Metcalfe as President, Mr. M. G. Srinivasa Rao as Secretary and Mr. E. G. McAlpine as Treasurer. An amalgamation of the Engineering College and Central College was effected so far as Sports activities are concerned and as a result of this activities increased and more matches were played by the combined teams.

Cricket.—The cricket club with Mr. K. Seshadri as the Captain has become very popular. A number of matches were played. A team was sent to Mysore and was beaten by the Victory Club, which contains many of the past students of the Central College. The same team beat us at Channapatna also when we went there this month. In regard to other teams we have won more matches than we have lost.

Football and Hockey.—This year was marked by a Madras team (Anantapur College) coming to Bangalore to play football and hockey. Our teams beat them in both the contests. The football team won a victory in Channapatna over a branch of the Victory Club.

Hockey.—Our Hockey team is fairly good now. It won against the Anantapur team and a number of home teams.

Tennis.—There are four Tennis Courts with a total membership of nearly seventy. They are under the immediate management of two assistant secretaries, Messrs. B. Ananthaswamy and B. Visvanath, students of the Central College and the Engineering College, respectively. The average level of tennis play in the College club may be said to be fairly high.

It has to be said to the credit of some of the players that they are important members of all the sections of sports. Messrs. A. C. Devaraj, G. N. Anniah, K. Seshadri, B. Ananthaswamy and T. N. Sivan deserve special mention.

The Sports Committee regrets to find that the total grant given this year by the University is about Rs. 1,500, less than last year's grant owing to the fact that the amount collected as Sports' fees this year was not made available for sports as in previous years. The committee hopes that the University will be pleased to increase the grant to the level of past years in order that the high standard in sports may be kept up in the colleges in Bangalore.

Thanks are due to Mr. E. P. Metcalfe, Principal and President of the Physical Culture Committee, for the great pains he has taken in promoting a love for Sports among the students.

B. V.

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COLLEGE OF ENGINEERING.

THERE has not been much doing since the last notes were written. The Students' Engineering Association met and elected its office bearers. A paper on 'fuel' was also read at one of the meetings of the Association under the presidency of Mr. S. Raghavendra Rao,

Professor of Mechanical Engineering. With the exception of the two events noted, the Association has done very little, and even its type-written magazine has yet to make its appearance. One rather striking characteristic more or less common to many of the associations in this country is that they show abundant energy (even disproportionate to the occasion) at one or two of their meetings (commonly the association day or the day of general meeting) but at other times their attitude is one of general torpor. As at the north or south pole, the associations have only one day in a year but with this difference, whereas the day and night at the pole are of equal duration, the night is very much longer in the case of the associations. It is hoped that the members of the association will wake up soon; if their slumber has been refreshing they may be able to put forth some activity.

The University sanctioned recently nearly a lakh of rupees for provision of mechanical equipment for the college, and Rs. 25,000 has also been sanctioned by Government for a similar purpose in the case of the Mechanical Engineering School. Since the two Institutions are to have a combined and common workshop for the present, a fairly well equipped laboratory and workshop will be available for the use of the College when the sanctioned amounts are spent. Already one steam electric set, one steam turbine, one gas producer and suction gas engine have been ordered from America for the Mechanical Engineering School and are on their way to India. The College is arranging to get important machine tools such as lathes, shaping and milling machines, a power hammer, etc., and several types of testing machines. When all these are received and set up, the efficiency of both the institutions will be considerably enhanced.

One of the Assistant Professors of the College, Mr. M. Venkatakrishna Rao left the College on transfer to the office of the Inspector-General of Education, and the students gave a farewell entertainment on his behalf. Mr. K. D. Joshi, M.A., B.E., a first class graduate in Engineering, has taken Mr. Venkatakrishna Rao's place.

The athletic activities of the College continue rather meagre. Although considerable facilities have been created for this purpose only a few of the students take part in recreation and this seems a more or less common feature of athletics and recreation in this country. A large part of holidays and leisure seems to be required in this country only to rest tired nerves even in the case of young men.

SCIENCE NOTES.

(COMPILED BY MR. B. VENKATANARANAPPA, M.A.)

Neglect of Science.—Professor A. Gray, in the course of his opening address as president of the section of mathematical and Physical Science at the Bournemouth meeting of the British Association held last month, said that the real cause of the prevailing neglect of Science, with all its pernicious results, was that almost all the political leaders of the country had received the most favoured and fashionable form of public school education, and were without any scientific education. An education in classics and dialectics, the education of a Lawyer he stated might be a good thing for lawyers; though even that was doubtful. For the training of men who were to govern a state the very existence of which depended on application of science and on the proper utilization of available stores of energy, it was, he said ludicrously unsuitable. He quoted an instance of an eminent counsel declaring in his presence, in a case of some importance involving practical applications of science, that one of Newton's laws of motion was that "friction is the cause of oscillation"! The helplessness of some eminent counsel and judges in patent cases, he added was a byword.

As things were, eminence in science, he said, was no qualification; it would even seem to be a positive disqualification for any share in the conduct of the affairs of the greatest industrial country. The scientific sides of public questions were ignored, he proceeded to say, nay, in many cases the rulers were unconscious of their existence. He quoted an instance of a recent discussion on the Forestry Bill in the House of Lords, a member of which illustrious body made the foolish assertion that forestry had nothing to do with science; all that was needed, the member said, was to dig holes and stick young trees into them. Could fatuity go further? This hereditary legislator did not seem to be aware that the growing of trees was a highly scientific industry; that there were habits and diseases of trees which had been profoundly studied; that, in short, the whole subject of silviculture bristled with scientific problems, the solutions of which had by patient labour, been to a considerable extent obtained.

Professor Gray quotes another instance of an eminent statesman suggesting that an electrical efficiency of 98 per cent. might by the progress of electrical science be increased fourfold. He concludes "that until scientific education has gone forward far beyond the point it has yet reached, until it has become a living force in the world of politics and statesmanship, we shall scarcely escape the ruin of our country."—(*Nature*.)

Specific nutritive values of different foodstuffs.—It has been supposed for a long time that while a certain amount of albumen in the food was indispensable for the building up of the tissues of the body the carbohydrates (including starches and sugars) and the fats were practically interchangeable, their function being the provision of heat and energy. The shortage of fat in Germany due to its diversion to the manufacture of nitroglycerine has naturally caused a painful interest in the subject, all the keener because there was likewise a shortage of sugar. Dr. Hans Aron of the Children's Clinic of the University of Breslan has published the results of some remarkable experiments with regard to the nutritive value of fats and oils, which seem to prove conclusively that a minimum quantity of fatty matter is irreplaceable by any other food substance, it being required for the maintenance of the organic structure in a state of health, and being therefore as indispensable as the minimum amount of protein which is likewise required. Moreover, he has discovered that not all fats and oils possess an equal amount of vital value. The best of all is butter fat, which can be replaced, however, either by the fatty substance found in the yolk of eggs, or by cod liver oil. Strange to say, most other oils, including those of such high food value as olive oil and almond oil are lacking in the essential property to which we have given the term "the vital value." Dr. Aron concludes that minimum amounts of the carbohydrates, the mineral salts and extractive matters of vegetable and animal origin are irreplaceable.

His many experiments have convinced him that it would not only be inadvisable, but highly dangerous to place human beings on a diet entirely lacking in fat, for a long period of time.

A specific nutritive value must be attributed, says Dr. Aron, to the carbohydrate also, at least so far as bodily growth is concerned, and a minimum percentage should be regarded as an indispensable element in the diet of the young growing child.

The researches with regard to the origin of scurvy, beri beri and similar diseases—clinical observations upon infants and young children—both teach us that fresh vegetables are important constituents of the

diet of man, and as we now see, their specific nutritive value depends upon the extractive matters that they contain. A form of nutriment in which such extractive matters are lacking is found by experiment to be insufficient for human beings. Such a diet may lead to serious disturbances in health and may lead even to death.

For this reason, in order to estimate the nutritive value of fruits and vegetables, we must take into account the fact that the value of such foods resides not so much in their percentage of albumen, fat or carbohydrate, as their richness in extractive matters.

It scarcely needs to be mentioned that the inorganic elements must also be considered. The nutritive value of these must be regarded as residing entirely in what has been termed the "specific nutritive value."

SCIENTIFIC AMERICAN SUPPLEMENT.

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The Zinc Contents of some Food Products.—Victor Birckner found that hen's eggs contain about a milligram of zinc, of which practically all is present in the yolk. Ordinary market milk contains, on an average, 4.2 milligrams of zinc per kilo., but variations are to be found in the milk from different animals. The zinc content of human milk is markedly higher than that of cow's milk. The presence of zinc, both in egg yolk and in milk, suggests that this element may exert an important function in nutrition.

JOURNAL OF THE LONDON CHEMICAL SOCIETY.

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Disease of Potatoes.—At the second meeting of the Mycological workers in India held at Pusa in February last, one of the subjects discussed was the disease of potatoes. It was stated that the ring disease was very common in South India and that this could not be checked by mere rotation of crops and by not growing solanaceous crops on potato fields. The systematic removal of all solanaceous weeds was considered essential.

It was pointed out that Italian seed tubers were resistant to ring disease, but tubers raised in India from these imported seeds were not resistant. It was also stated that if tubers from wilted plants showing no signs of ring disease were planted, they gave a diseased crop; it was therefore considered necessary to remove all wilted plants.

Affected tubers, it was stated, could be recognised by their having black, dead eyes. Infection from diseased seed to healthy seed was carried through the knife at the time of cutting the setts. This infection was avoided by dipping the knife in a pot of boiling water, immediately after it had cut a ringed potato. On account of the ring blight, continuous potato growing had become unprofitable, and so the cultivators in Mysore had introduced a rotation with mulberry.

PROCEEDINGS OF THE BOARD OF AGRICULTURE IN INDIA.

THE DASARA TOURNAMENTS.

WHO can afford to forget these memorable days which come between the Hindu month of *Bhadrapad* and one of the greatest of Indian festivals—the Dipavali? What shall we call that week? Shall we call it our parliamentary season, or shall we associate ourselves with the populace in calling it a period of oriental grandeur and magnificence, or shall we name these the days of the “annual fair”? Or shall we, like good sportsmen, speak of our “athletic festival”?

On the hill to the west, beside the college, lies our not unworthy Olympia, with its great playing-fields and the bordering shade of their margosa trees, and its magnificent view of the whole city. Only a small number, alas! of our Dasara visitors as yet attend our tournaments, but the spirit is abroad, the numbers are increasing, and enthusiasm leaves nothing to be desired.

The devoted spectator has a strenuous week—to say nothing of the player, who frequently represent his college in several different games. Hockey in the morning, cricket through the heat of the day, football in the evening—the day does not contain many leisure moments.

As we look back upon the tournaments, we remark that this was Bangalore's year. In the hockey tournament, for instance, the final match was between the Maharaja's College and the Indian Hockey Eleven, Bangalore; and after a draw the visitors were victors. The cricket trophy went, not indeed to Bangalore, but to Closepet. In tennis the success of the Bangalorean, Mr. Raja Iyer, was practically uninterrupted.

The commencement of the Junior Dasara Football tournament was as unostentatious as its end was dramatic. Though this tournament saw its close during the Dasara week it was restored to life by some technical jugglery on the part of the vanquished. Accordingly

the two local high schools (the finalists) were asked to replay, and the match ended much to the relief of the impartial many in a win for the original victors. No comment is necessary on this matter. It is enough to point out that we are yet to learn many valuable lessons in sport. In short we do not yet know how to take defeat.

Another similar incident is still more interesting. The inevitable Match between the Maharaja's College and the Herculeans occurred in the semi-final of another tournament. A draw was the first result. The second attempt resulted in a fiasco, the game having to be abandoned soon after the College had scored a goal.

The cricket tournament must not go unrecorded. There was something rather tragic about the so-called "Junior" competition. The A.V. school-children were compelled by an unkindly providence to try their strength against sadly superior bone and muscle. Undoubtedly cricket is a game of glorious chances, but when the parties are so ill-matched there can be neither glory for the stronger nor chance for the weaker. It so happened that in almost all the matches in the junior branch of the tournament youngsters like those of the High School teams from Channapatam and Chitaldrug were drawn to play against opponents very much too strong for them. A series of interesting photographs might have been taken when the babies of Channapatam took the leather in their hands to send "the stalwarts of the workshop" home. These young boys put up a noble fight, thanks to their own sportsmanship and able captaincy. The match between another mofussil high school and the same Bangalore team was only a second edition of the first. Eventually the Mechanical Engineering School won the trophy after defeating the local high school.

In the senior competition the two colleges were defeated by two private clubs. In the final there was a remarkable struggle between the Mysore Cricket Club and the Victory Club of Closepet. No match in the annals of Mysore cricket has ever been played and watched with such keenness or to so exciting an ending of three full days' play. The Victory Club won by a single run.

H. KRISHNA RAO.

GENERAL EDUCATIONAL NOTES.

EDUCATION IN CEYLON.—In Ceylon, “where every prospect pleases,” the educational prospect appears to be brighter than in any part of India,—with the exception, let us think, of Mysore. Mr. Sharp’s Notes on *Vernacular education in Ceylon* come as something of a revelation. He institutes a comparison with India, and then proceeds to give reasons for Ceylon’s pre-eminence in the excellence and scope of its primary education. In Ceylon the percentage of literacy for males is 40·4 as against 10·6 in India; for females 10·6 as against 1. There is life, energy, enthusiasm from the lowest to the highest classes in these schools. “The visitor who is acquainted with Indian village conditions will be impressed in Ceylon by the wholesale way in which things are done and also by the excellence of the education imparted. He will be thinking of the small dark building, stuffy in summer and sunless in winter, with its fifty pupils, mainly crowded together in the infant classes, which so often represents the educational centre of an Indian village; and he will contrast it with these open school-rooms, spacious and airy, with anything from 100 to 1,000 pupils divided into well-proportioned classes, each with its teacher and monitor.” One reason for such educational prosperity is the natural wealth of the island, which renders possible an adequate expenditure upon education. The annual value of exports is £3·6 per head of the population against £0·53 in India.

“The expenditure on education from public funds per head of the population is more than double that in India. And yet this result is accomplished by the allotment to education of a smaller percentage of the public revenue. Ceylon spends 3·5 per cent of her public revenue on education, India spends 4·3.” Again, there is a more general desire for education in Ceylon; and, *purda* being of less importance there, girls are willingly allowed to attend school. And education has been encouraged by the fact that, without denationalisation, the people of Ceylon have responded in a marked degree to western influence, this being partly due to the exceptionally large proportion, in the island, of Europeans and Eurasians. The teachers are well-trained and reasonably

paid. The numerosity of government schools helps to maintain a high standard. Control and inspection are adequate—the provision for inspecting and controlling officers being many times greater than the corresponding area in India. Mr. Sharp hopes that, though the natural advantages of Ceylon place it in a particularly fortunate position, his notes “may be found to contain some suggestions not altogether inapplicable to India,” and those to which we have referred to point several morals,—that a considerable factor in educational progress is the creating of the desire for education among people of the labouring classes, and that material prosperity is a condition of the growth of this desire; that without the provision of bright and healthy conditions improvement in education cannot occur; that the financial cost of efficiency is considerably greater than the present expenditure in India; and that a considerably increased number of inspectors and inspectresses is desirable.

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THE CINEMATOGRAPH AND EDUCATION.—The *Library Miscellany* (Baroda) reports an “informal talk given at the Baroda Residency” by Mr. A. B. Clarke, Commissioner of Education, Baroda, its subject being “The cinema and mass education.” Light, portable, but most efficient machines are now easily procurable,—and they make their own electricity. They can be taken, with the greatest ease, from village to village. And the amount of illumination they may shed, on matters ranging from “publicity” topics to sanitation, is unlimited. The most illiterate can understand the pictures, with their vernacular explanation, and the thing has all the attractiveness of a show. The Kok machine, small though it be, can make a picture visible to 500 people. “The village audience sits on both sides of the screen. The portion of the audience on the side removed from the machine suffers one slight inconvenience; to them the letterpress which describes the film appears upside down; but as it is immaterial to most of them whether the letterpress, in English, is upside down or not, there is practically no inconvenience to them at all.” We find, in the *Times Educational Supplement* a reference to the admirable and entirely practicable idea. One thousand American schools are already equipped with machines, and apparently most new schools are to have them. Meanwhile the film producers are busy, and “it is announced that four educational films will be released every week.”

Mr. Clarke amusingly illustrates the school possibilities of the cinema. “When,” he says, “I first attempted to explain English

Literature to the youth of Baroda...I prided myself that the students to whom it was my fortune to lecture shared my enthusiasm for my subject and that I succeeded in making myself thoroughly clear to them. There came a day, however which shook this confidence even as an earthquake shakes a fortress. The College had what is called a "social gathering," and, as usual, scenes from the greatest of the dramatists formed a part of the programme. One of those chosen was from *Hamlet*. The curtain was removed, and the Prince of Denmark made his slow, portentous entry. I regarded the scene with the glowing feelings natural to the occasion; but I had soon to remove my agitated eyes; for the Dane wore on his head, not the plumed and graceful gear which custom, if not historical accuracy, demands, but a battered white sun topee. Presently also his father's ghost terrified all beholders, with his head similarly covered. Now it is possible, by showing Shakespearean plays on the cinematograph, to explain the intricacies of dramatic costume to would-be players. This is but a small illustration. Similarly, in the teaching of geography, history, natural science, or even politics, it is possible to use the cinematograph to reinforce the lessons delivered or read." A good deal, of course, can be done by means of the mere "magic lantern." Mr. Sell has made excellent use of it in Bangalore, in the exposition, for instance, of Shakespeare and Dante. But the lantern will not compare with the cinema, and probably the expense of the use of the latter in schools and colleges is no longer, or very soon will cease to be, prohibitive. As for village education, no expense would seem too great to secure what cannot otherwise be secured at all.

Technical and industrial education.—"James Watt," said the Governor of Bombay in his first address as Chancellor of the Bombay University, "did more to make Britain what she is than Burke, Carlyle or Mill." And it has become evident from numerous speeches that, in his view, the most urgent educational necessity in India at the present moment is the development of technical education. That he feels keenly on the subject is evident from the directness of his speech. At Dharwar he declared,—“What education in India has to provide India with in the future is not merely a man who has crammed till he can pass an examination—such a man is not educated at all—he is merely venerated and varnished over, often hiding defects which are real and which in spite of his degree will make him quite unfitted for the work of the world. Furthermore, their inclinations are all trained solely in directions leading to the Bar and the clerical services. You are never going to

build up a country in these directions alone—India needs her youth, and her best educated youth, in her trade, in her industries; in her banks and in her agriculture. . . . Any man who is a man wants to create something. . . . You want to create openings for yourselves to found small industries—to fight them through to success. . . . I believe that in the youth of India there is gallant stuff if it is only put to the right use, but you must strike out a new path. ” In the Bombay Legislative Council he declared his conviction that the State “should provide facilities for civil, mechanical and electrical engineering, trade education and minor handicrafts.” And at the Deccan College he spoke in precisely the same train. A great opportunity for the development of national industry was at hand, a body of well-trained young men must be ready for it, and his Government was making enquiries with a view to encouraging not merely advanced technical education but also an elementary mechanical education which would be of use, for example, to the ordinary agriculturist who adopts modern machinery. Sir George Lloyd's enthusiasm is providing a strong impulse in the direction in which it is most needed.

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